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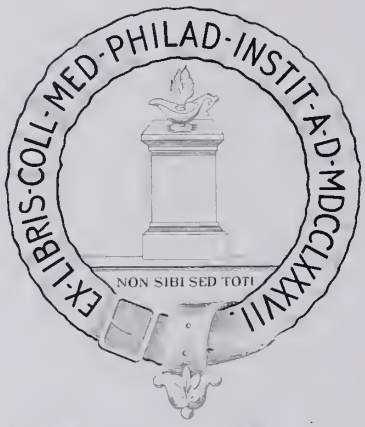

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JOURNAL of the Medical Association of the State of ALABAMA

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vol. 43 #1

JULY 1973

Everybody experiences psychic tension.

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Some people develop excessive psychic tension and need your counseling

and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium
azepam) part of your treatment
n, check on whether or not the
ient is presently taking drugs
l, if so, what his response has
en. Along with the medical and
ial history, this information can
p you determine initial dosage,
possibility of side effects and
ultimate prospects of success
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While Valium can be a most
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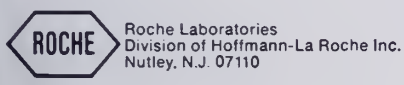

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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(diazepam)

To help you manage excessive psychic tension

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THE JOURNAL

of the

Medical Association of the State of Alabama

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The diabetic who has too much...

too much sugar, too much fat.

Maybe the last thing she needs is more of her own insulin. Especially when you consider that many overweight diabetics already have normal or high levels of endogenous insulin and that insulin is lipogenic.

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phenformin HCl

lowers blood sugar without raising blood insulin.

For complete details, including dosage, please read the prescribing information. It's summarized below.

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cations: Stable adult diabetes mellitus; sulfonyl- failures, primary and secondary; adjunct to lin therapy of unstable diabetes mellitus.

traindications: Diabetes mellitus that can be ulated by diet alone; juvenile diabetes mellitus is uncomplicated and well regulated on in- n; acute complications of diabetes mellitus tabolic acidosis, coma, infection, gangrene); ng or immediately after surgery where insulin dispensable; severe hepatic disease; renal dis- e with uremia; cardiovascular collapse (shock); r disease states associated with hypoxemia.

nings: Use during pregnancy is to be avoided.

cautions: 1. *Starvation Ketosis:* This must be erentiated from "insulin lack" ketosis and is racterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**

2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis

3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.

Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake. (B) 98-146-103-E (6/72)

For complete details, including dosage, please see full prescribing information.

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DBI 9105

What should a medication for sleep be expected to provide?

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psycholog dependence have not been reported o recommended doses, use caution in ad ministering to addiction-prone individ or those who might increase dosage.

Precautions: In elderly and debilitated initial dosage should be limited to 15 m to preclude oversedation, dizziness an or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive eff Employ usual precautions in patients who are severely depressed, or with

Sleep for 7 to 8 hours without need to repeat dosage during the night

No sleep medication has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia patients given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewer nighttime awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need to repeat dosage during the night.

Sleep with consistency

Dalmane has been shown to be consistently effective even during consecutive nights of administration. Thus there is little likelihood for the need to increase dosage to maintain therapeutic effect.

Dalmane (flurazepam HCl) is a distinctive sleep medication—a benzodiazepine specifically indicated for insomnia. It is not a barbiturate or methaqualone, nor is it related chemically to any other available hypnotic.

Sleep with relative safety

Chronic tolerance studies have confirmed the relative safety of Dalmane; no depression of cardiac or respiratory function was noted in patients administered recommended or higher doses for as long as 90 consecutive nights. Dalmane is generally well tolerated and morning "hang-over" is relatively infrequent. Dizziness, drowsiness, lightheadedness and the like have been the side effects noted most frequently, particularly in elderly and debilitated patients. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

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(flurazepam HCl)

When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

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depression or suicidal tendencies.
ic blood counts and liver and kid-
nction tests are advised during
ed therapy. Observe usual precau-
n presence of impaired renal or
c function.

se Reactions: Dizziness, drowsi
ightheadedness, staggering, ataxia
lling have occurred, particularly
rly or debilitated patients. Severe
on, lethargy, disorientation and
probably indicative of drug intoler
r overdosage, have been reported.

Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

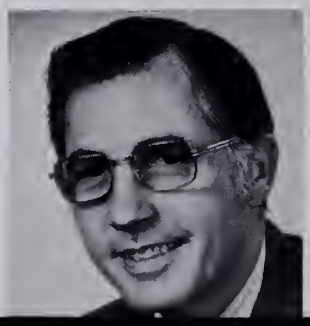
Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American Pharmaceutical Association



"Too many doctors are indiffe ent to the economic consequences their decisions." So stated a recent issue of *Medical News Report* (December 4, 1972), an independent weekly newsletter published by forr AMA Chief Executive F. J. L. Blasingame, M.D.

Doctor, are you indifferent...?

In discussing an anticipated i crease in Blue Shield rates, Dr. Bla ingame's newsletter had this to say

"In general, it can be said, MD have given the impression they are not particularly concerned with the increase in cost of health care to th patients...

"True, an MD's training is primarily scientific, but in the real wo of practice, all of his scientific deci sions have a price tag, or an econor impact. The economics of health ca beckon the practitioner's attention Concern for economics of medicine

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical Manufacturers Association

When the pharmacist recommends that a drug product other th the one ordered be dispensed, the prescriber invariably permits the change when he feels the best inter ests of the patient will be served.

Shortcomings of Pro-Substitution Argument

The fact remains that it is nec sary for the prescriber to know that the change is being contemplated, and to be in a position to consent or demur. Without that opportunity, th unilateral decision of the pharmaci made in the absence of clinical kno edge of the patient, could expose hi to needless risks, and in addition, jeopardize the relationship betweer the professions of Pharmacy and Medicine. In my view, there is nothi in the pro-substitution argument th offsets these risks.

The Issue of Drug Knowledge

Substitution advocates claim that the primary justification for changing the rules is the desire to better utilize pharmacists' knowled about drugs. Yet the pharmacist's task to keep current on the entire field of drug therapy, to some degre puts him at a disadvantage. Most often, a practicing physician will ne expert knowledge of no more than 2

Advertisement

ld be an obligation of medical ice...

"Medical societies ought to con- continuing campaigns to point he substantial savings that could alized thru deductible insurance rotection for catastrophic ill- . At the very least, they should, in atients' interest, question the cs of any insurance organization raises health care costs by forc- olicyholders to buy insurance may not need or want and prob- won't ever use.

"Too many doctors are indiffer- o the economic consequences of decisions. Too many, for ex- le, habitually hospitalize patients he convenience of the MD. It's sense to deny such habits exist...

"Doctors, thru their medical so- es, have unhesitatingly appealed eir patients for support in the t against government interference the private practice of medicine. the public in the past has re- ded. It's time the American Med- Association and state and local ical societies paid off the debt by sive action to hold down the cost edical care."

t of Drugs

Insurance rates and hospital rges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

---

0 drugs that he selects to treat the ority of conditions encountered in practice. Moreover, the physi- n's choice of a specific brand is ed on his knowledge of the pa- t's medical history and current dition, and his experiences with particular manufacturer's duct.

Some substitution proponents e argued that the dispensing of a scription is a simple two-party nsaction between the pharmacist l the patient, and that a substitut- pharmacist may avoid even a hnical breach of contract by simply ifying the patient that he is making substitution. I would judge that courts would be sympathetic ard a pharmacist who substituted hout physician approval and who dertook a legal defense that seeks make the patient responsible for pharmacist's actions.

luced Prescription Prices?

Substitution advocates are ggesting to the consumer, and par- ularly the consumer activist, that luced prescription prices could ow legalization of substitution. have seen absolutely no evidence ustify this claim. To the contrary, perience in Alberta, Canada, where stitution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

President's Page

DR. CAMP

AS MY BOAT AND I APPROACH THE MUDDY RIVER, WHICH WE MIGHT COMPARE TO THE MIGHTY SURGE OF SOCIALISM WHICH AFFLICTS OUR COUNTRY, I AM FRIGHTENED AT THE ROAR OF THE WATER

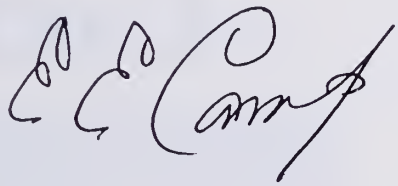
Now, let us examine our position and see just how we arrived at the brink of national health insurance which is now just around the corner. A good many years ago when private health insurance first became available practically all the policies stated that only services performed in a hospital would be paid by the insurance company. The companies have lived to see the folly of this prerequisite, however, it was intended to prevent unethical or (perhaps interlaced with) dishonest physicians from over-using the services in their own offices. This, unfortunately, did not prove to be the case. We now have to face the problem of the patient who calls in and says "doctor I have insurance and I need a general physical check-up and I want you to put me in the hospital." Unfortunately, many of us succumb to this demand and say, to salve our consciences, "well he did pay for it so why not let him use it?" This also is another sign which fits in with the general overall shortage of physicians which I have previously alluded to. Once we get a patient in the hospital we can call on him at our convenience. We can order all manner of tests, either needed or unneeded. And, finally, we may even get around to doing a history and physical. This, of course, results in extremely high hospital costs and extremely expensive diagnostic procedures. Now, we have satisfied both the patient and ourselves by doing this, but we have not been exactly honest with the health insurance programs now in existence nor with the federal government's medicare and medicaid programs.

We also have another person that we have made happy by admitting everyone who demands to be, that is, the hospital administrator. He has expensive equipment that he wishes to keep busy and if he has empty beds and rooms he is most grateful to a physician who will keep these rooms filled regardless of whether or not he properly belongs in the hospital.

We must remember the old adage that he who dances must pay the fiddler. Now the fiddler in this case is the insurance company and he is getting a little bit tired of being imposed upon unnecessarily. And as a result of his complaint that we make him play far too many tunes we have placed a few road blocks to protect him in the nature of peer review committees utilization committees, etc. Unfortunately, utilization committees and peer review committees have not functioned well because of a very elementary fact. The fact is that no physician likes to criticize the treatment and care that another physician is rendering his patient. We all, including your president, realize that our judgment is not always proper. That we too have made errors in clinical judgment and we too have made many perhaps unnecessary examinations in our lives.

We are also constantly reminded that we have to live in fear of a patient filing suit claiming malpractice for tests not done or diagnosis being incorrect. But, I think we will have to in the future reexamine our own conscience and see if probably we are not over reacting to this constant fear of suit.

Now, the PSRO program as I understand it is simply a super utilization committee which will be assisted by a computer program on every patient in every hospital in the country who wishes to cooperate with the federal government or admit medicare and medicaid or any other federal program. I am sure while this may be confined to the government programs at the present time, I think it will only be a short time before the insurance companies, likewise, will demand PSRO programs in approved hospitals. As the program was outlined to me, a computer will be set up in each hospital, that is, the input to a computer will be set up in each hospital and a person, probably an RN will be hired by the PSRO program to make the input of information and data into the computer. The computer will then, in 36 hours, print out any marked deviation from the norm which has been established for the given diagnosis of the patient. This will then be referred to the local utilization committee and the local utilization committee will be expected to correct the matter at a local level if possible. If this proves to be impractical and impossible then the deviation from the norm will be called to the attention of the PSRO committee. We have one opportunity to make the PSRO Program work under physician adjudication. If we fail in this, we are going to have people other than physicians or the PSRO committees who will judge the appropriateness or the lack of appropriateness of our treatment. As a physician, I certainly resent the capitol scrutiny under which I will have to work; but on the other hand, it seems that we are in the position that if we do not make the PSRO program work under physician supervision we are going to be much worse off and if we completely disregard the PSRO program it seems that we are inviting national socialism of medicine immediately. If we can make the PSRO program work we may be able to put off a few more years of national health insurance and to preserve the private practice of medicine which we all know is the best possible system of medicine in the world.



E. E. Camp, M. D.
President

"Dial-A-Baby"

The latest thing in hospitals is Dial-A-Baby. Well, at least it is at Martin Luther Hospital, Anaheim, Calif. The closed-circuit television system lets older brothers and sisters—too young to visit the nursery—see their newly arrived baby brother or sister. The older youngster just picks up a phone in the hospital lobby and asks to see the baby, who is wheeled in front of a camera in the nursery. If he wants to, the older child can talk to Mom. The system is designed to relieve the older child's anxiety and reduce sibling rivalry.

Every day is the best day in the year. He is rich who owns the day, and no one owns the day who allows it to be invaded with fret and anxiety. Finish every day and be done with it. You have done what you could. Forget blunders and absurdities as soon as you can. Tomorrow is a new day—too dear, with its hopes and invitations, to waste a moment on the yesterdays.

—*Ralph Waldo Emerson*

If you destroy a free market, you create a black market. If you have 10,000 regulations, you destroy all respect for law.

—*Sir Winston Churchill*

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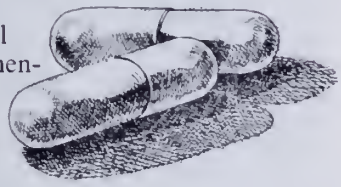
›u carry one of the heaviest ›tient loads in the country. ›nce this may include ›number of patients with ›stritis and duodenitis... ›u should know ›ore about Librax®

›elps reduce ›xiety-related G.I. symptoms

›atient may blame his attacks of gastritis or ›denitis on "something he ate" but contribut- › factors may be his job, › rital problems, financial › rries or some other unmen- › ned source of stress and › essive anxiety that › cerbated the condition. › ether it is "something › ate" or "something eating him," adjunctive › rax can help. Librax offers both the antianxiety › ion of Librium® (chlordiazepoxide HCl), that can › p relieve excessive anxiety, and the dependable › icholinergic action of Quarzan® (clidinium Br), › t can help reduce gastrointestinal hypermotility › l hypersecretion.



Patient-oriented dosage — up to 8 capsules daily in divided doses

For optimal response, dosage can be adjusted to suit patient needs—1 or 2 capsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

adjunctive

Librax®

ROCHE

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

› ore prescribing, please consult complete product information, › ummary of which follows:

› ntraindications: Patients with glaucoma; prostatic hyper- › phy and benign bladder neck obstruction; known hypersen- › vity to chlordiazepoxide hydrochloride and/or clidinium › omide.

› rnings: Caution patients about possible combined effects › h alcohol and other CNS depressants. As with all CNS- › ing drugs, caution patients against hazardous occupations › uiring complete mental alertness (*e.g.*, operating machinery, › ving). Though physical and psychological dependence have › ely been reported on recommended doses, use caution in › ministering Librium (chlordiazepoxide hydrochloride) to › own addiction-prone individuals or those who might increase › sage; withdrawal symptoms (including convulsions), following › continuation of the drug and similar to those seen with bar- › urates, have been reported. Use of any drug in pregnancy, › tation, or in women of childbearing age requires that its › tential benefits be weighed against its possible hazards. As › h all anticholinergic drugs, an inhibiting effect on lactation › y occur.

› ecautions: In elderly and debilitated, limit dosage to smallest › ective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; › rease gradually as needed and tolerated). Though generally › t recommended, if combination therapy with other psycho- › pics seems indicated, carefully consider individual pharma- › logic effects, particularly in use of potentiating drugs such as › AO inhibitors and phenothiazines. Observe usual precautions › presence of impaired renal or hepatic function. Paradoxical › ctions (*e.g.*, excitement, stimulation and acute rage) have › en reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

We Care About Physical Fitness

The basic purpose of the physical fitness project of the Woman's Auxiliary to the American Medical Association is to help to motivate people to engage in physical fitness (recreation) activities suited to their personal needs and interests. People should not only have an initial examination, but periodic check-ups, too. This, along with a graduated exercise program—one that begins with moderate activity and gradually increases in duration and intensity— can help you avoid problems. There are many opportunities for participation in informal, individual physical fitness activities in virtually any community setting, for example, walking and/or hiking, jogging, skiing, cycling, gardening, skating, swimming and calisthenics. Other opportunities for participation in semi-formal activities are bowling, golf, handball, tennis, horseshoes, badminton, squash and other net and racquet games. Strength and endurance developed through regular exercise enables one to perform daily tasks with relative ease. A person uses only a small part of this physical reserve in routine activity. Poise and grace are by-products of efficient movement. They help one to feel at ease in social situations and are factors in good appearance. Enjoyable exercise can provide relief from tension and serve as a state and natural tranquilizer.

Good nutrition is an integral part of any physical fitness program. An adequate intake of the seven basic food groups, along with a rational program of useful exercise, adds immeasurably to the zest of life. Remember that a person can be well-nourished and still not be physically fit, but he can never be physically fit without being well-nourished.

Physical activity helps control weight and will also aid to prevent degenerative diseases. Diseases of the heart and blood vessels, diabetes and arthritis strike the obese more often and more seriously than they strike those of desirable weight. Mounting evidence indicates that exercise is one of the factors in maintaining the health of the heart and blood vessels. Active people have fewer heart attacks and a better recovery rate from such attacks than the inactive.

MRS. GRADY

Being fit means being able to interact effectively with our environment, with stress, with challenge, with life as a whole. This makes living a lot more fun, a lot more worthwhile. Let's care enough to be physically fit.

Betty Grady

Betty Grady, President

The Rx that says "Relax"

BUTISOL Sodium provides highly predictable sedative effect: minor dosage adjustments are usually all that's needed to produce the desired degree of sedation. (With 3 dosage forms and 4 strengths to make adjustments easy.)

BUTISOL Sodium offers prompt, smooth, relatively non-cumulative action: begins to work within 30 minutes...yet, because of its intermediate rate of metabolism, generally has neither a "roller-coaster" nor a "hangover" effect.

BUTISOL Sodium is remarkably well tolerated: a 30-year safety record assures you that there is little likelihood of unexpected reactions.

BUTISOL Sodium saves your patients money: costs less than half as much as most commonly prescribed sedative tranquilizers.*

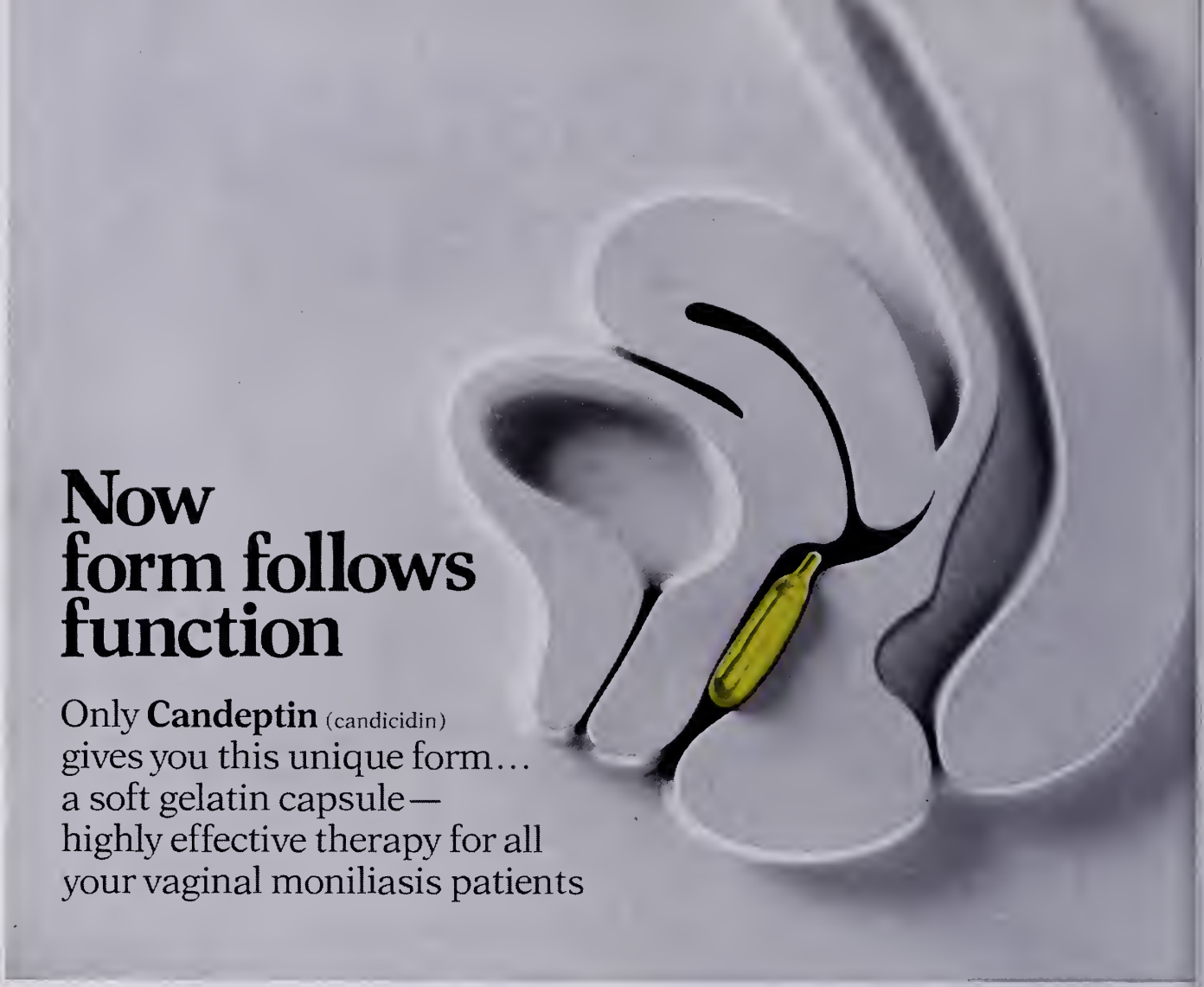
These are four good reasons for prescribing BUTISOL Sodium for the many patients who need to have the pace set just a little slower. Its gentle daytime sedative action is often all that's needed to help the usually well-adjusted patient cope with temporary stress.

*Based on surveys of average daily prescription costs.

Butisol SODIUM®
(SODIUM BUTABARBITAL)

Contraindications: Porphyria, sensitivity to barbiturates, or susceptibility to dependence on sedative-hypnotics. **Warning:** May be habit forming. **Precautions:** Exercise caution in: moderate to severe hepatic disease; withdrawal in drug dependence or the taking of excessive doses over a long period, to avoid withdrawal symptoms; elderly or debilitated patients, to avoid possible marked excitement or depression; use with alcohol or other CNS depressants, because of combined effects. **Adverse Reactions:** Drowsiness at daytime sedative dose levels, skin rashes, "hangover" and gastrointestinal disturbances are seldom seen. **Usual Adult Dosage:** For daytime sedation, 15 mg. to 30 mg. t.i.d. or q.i.d. For hypnosis, 50 mg. to 100 mg. **Available as:** Tablets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. per 5 cc. (alcohol 7%). BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg., 30 mg., 50 mg., 100 mg.

McNEIL McNeil Laboratories, Inc., Fort Washington, Pa. 19034



Now form follows function

Only **Candeptin** (candicidin) gives you this unique form... a soft gelatin capsule— highly effective therapy for all your vaginal moniliasis patients

CANDEPTIN® (candicidin) VAGELETTES™ Vaginal Capsules...a unique dosage form... anatomically and therapeutically designed to extend flexibility in the treatment of vaginal moniliasis.

Virtually unlimited application

CANDEPTIN VAGELETTES Vaginal Capsules provide the specific high potency antimonilial agent, candicidin, in a soft gelatin capsule—the shape designed with your patient in mind. It permits easy manual insertion without the need for an applicator or inserter...of particular value for the pregnant patient...for *intravaginal use.* By cutting off the tip of the narrow soft end, the contents can be extruded through an intact hymen for *intravaginal use.* And it is readily adaptable to *topical application* for labial involvement, and/or *intravaginal use* to treat mucosal infection.

CANDEPTIN (candicidin) provides:

Rapid results

Prompt, symptomatic relief—itching, burning, and discharge subside in 48-72 hours![1]
Soothing, miscible ointment permits complete contact with affected tissue.
Usually cures in a single 14-day course of therapy.[2,3,4]

Safe

Exact dosage assured.[2,3]
No side effects, clinical reports of irritation or sensitization extremely rare.

Convenience

Easy to use intravaginally and/or topically for labial involvement.
Encourages patient acceptance and cooperation.
Therapy is easy to start in your office.

Clinical proof of potency

CANDEPTIN (candicidin) is significantly more poter *in vitro* than nystatin.[5] CANDEPTIN Vaginal Ointmer and Tablets have a clinical record of cure rates of 90% and more in pregnant and non-pregnant patients![1,4,6] In recent studies on CANDEPTIN VAGELETTES Vaginal Capsules, involving both gravi and non-gravid patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Unique CANDEPTIN® (candicidi VAGELETTES™ Vaginal Capsul

Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: **1.** Olsen, J.R.: Journal-Lancet *85*:287 (July) 1965. **2.** Giorlando, S.W.: Ob/Gyn Dig. *13*:32 (Sept.) 1971. **3.** Decker, A.: Case Reports on File, Medical Department, Julius Schmid. **4.** Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. **5.** Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. **6.** Friedel, H.J.: Maryland M.J., *15*:36 (Feb.) 1966.

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CANDEPTIN®
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Life of Crime More Likely For Children of Criminals

Children of criminal mothers are much more likely to become criminals themselves, according to an Iowa study reported in the *Archives of General Psychiatry*, a publication of the American Medical Association.

This finding holds true even when the children are removed from their parents at very young ages and adopted into non-criminal families, the report says.

The mothers consisted of a group of 41 white offenders who had given up babies for adoption. Most of the mothers were inmates of the Women's Reformatory, Rockwell City, Iowa, during the years 1925 to 1956. The 52 babies of these mothers were compared to a control group of 52 infants born to non-criminal mothers and given up for adoption during the same years.

Most of the offspring of criminal mothers were separated at one year of age or younger, and none beyond the age of three years.

The study showed that eight of the children of criminal mothers have arrest records, while only two of the control group have records. Seven of the first group have been convicted of an offense, compared to one control. Four of the children of imprisoned mothers have records of two or more arrests, compared to none of the controls. Five of the first group have been incarcerated.

Author of the study is Raymond R. Crowe, M.D., of the Department of Psychiatry, University of Iowa College of Medicine, Iowa City.

Many people know how to work hard. Many others know how to play hard. But the rarest talent in the world is ability to introduce elements of playfulness into work, and to put some constructive labor into leisure.

—*Sidney Harris*

Television To Play Larger Role In Continuing Education Of Physicians

Perhaps the most significant communications development of the Twentieth Century is the television.

An opening statement such as the above will surely draw fire from the many proponents of other communication devices such as the telephone, radio (receiver and transmitter), and the motion picture. Although the original discovery of the radio and telephone occurred in the late Nineteenth Century, there would be few to argue with the statement that they were developed in this century. But while the above concession is easily made, the arguments for these devices as the most significant development could be long and plentiful. However, I am prepared to deal with them.

The technology involved in speaking into a telephone in one city and having your voice heard in another city, state or country, is mind-boggling to the average citizen. The importance that the telephone plays in our everyday lives is not to be discounted. We use it to question, inform, prepare, make business deals, and appointments, and chat with friends. In the form of a "hot line," heads of state can even use it to head off disaster between countries. However, the telephone is a tool—a wonderous tool, but a tool.

The radio burst into importance between the two major wars of the first half of this century. The advantages is supplied to prewireless days are uncountable. Radio has done everything from inform to the saving of lives. The receiver-transmitter is an invaluable device to those cut-off from the mainstream of life. The ship captain, the pilot, the missionary, the explorer, all have benefited from the radio. The radio became the first mass production item of Commercial Airways entertainment. The radio brought us events of the world as they unfolded. The radio does almost everything from inform to entertain.

The student of sociology will be quick to explain the impact of the motion picture upon society. Not only its detriments such as the spread of violence, etc., but its position of being the focal point of creating new social interaction in the form of "family night at the movies." How much courting has been done on "movie dates"? How many theatre managers have been Saturday morning babysitters? The entertainment potential of the motion picture is almost unlimited, but have we ever learned anything from a movie? Have we ever learned anything from a telephone or radio other than spot announcements or homework assignments for the sick child?

The educational value of television forces me, an educator, to deem it the most significant communications development of the twentieth century. No parent of a three-year old fan of "Sesame Street" can deny the educational value of the family TV.

The educational potential of the television is just now beginning to be realized. What future benefits we will derive can only be speculated at, but the development of the video-cassette is a monumental beginning.

(Continued on Page 20)

. . KINESED® provides more complete relief.

Gastroenteritis, colitis, gastritis or duodenitis can produce spasm or hypermotility, gas distention and discomfort. But Kinesed can provide a balanced formulation to relieve these symptoms:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distention and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: *Adults:* One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms.

Children 2 to 12 years: One-half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Division of ICI America Inc. | Wilmington, Del. 19899

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Each *chewable tablet* contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Chuckwalla (*Sauromalus obesus*):
This southwestern desert lizard seeks shelter in crevices of rocks.
When attempts are made to probe him from his niche, he gulps air until his abdomen is distended up to sixty per cent over its normal size...
thus wedging himself tightly in place and preventing capture.

(Continued from Page 16)

Within the last year there has appeared a technological development that is of immense value to the physician. The U-Matic Video-Cassette player has been developed, which allows the physician to sidestep the worries and problems of operating some very complicated machinery in order to take advantage of the instructional material on video-tape. Some such machinery is so complicated that it requires an audio-visual specialist to operate it.

The video-cassette player is as simple to operate as the tape deck in your car or the cassette recorder in your desk drawer. Hook the machine up to any UHF/VHF color television via a simple and inexpensive attachment, insert the cassette, press the play button, and what appears on your screen is a program of individualized instruction that is interference free, leaving the image on the screen color tuned and sharp. Imagine the advantage of receiving your continuing education from some of the world's finest teachers in the privacy of your office, den, or conference room, and at your most convenient time. To have a subscription to the best medical instruction this country can offer is an advantage the American physician should not take lightly.

Shortly after the development of the U-Matic Viedo-Cassette player, a player-recorder appeared. The recorder-player is the player with the addition of a unique feature, the ability to record on video-tape, right off the commercial airways. If there is anything the physician wishes to view on his television, but he doesn't have the time to watch when it is being aired, his player-recorder will record the program and he can view it at his convenience. Recordings of other tapes can also be made.

The most sophisticated equipment is next to useless if the material to be utilized by the equipment is not of a high quality. Some of the oldest names in audio-visuals along with some new organizations staffed by prestigious people are producing the "software" for the U-Matic player. The tapes being produced are of the highest quality workmanship and the teaching is by medical school instructors of well-known reputation. Each day brings the production of more continuing education tapes so at present there are hundreds of subjects, procedures, techniques, etc., available. The companies involved take pride in not producing filmed lectures.

The emergence of the U-Matic player has created a situation the physician should investigate and take advantage of. The cost is not prohibitive by any standard for the private practitioner and is definitely within the budget of hospitals trying to provide continuing education services to the staff. There are tapes available for all members of the hospital staff as well as the physician.

The necessity of receiving continuing education from sources other than schools of medicine sponsored programs has already been recognized by the American Academy of Family Physicians and the American Medical Association.

Academy "elective credit" can be received if the viewing is done in an organized manner with Academy credit applied for prior to the viewing. The program must include a question period under the direction of a competent specialist. The Physician's Recognition Award will allow twenty-two (22), Category Five (Non-Supervised Individual CME Activities) credit hours for viewing video-cassettes in the privacy of your home, office, or hospital conference room.

The educational possibilities of the video-cassette are as unlimited as the motion picture camera itself. As more physicians become involved in continuing their education through the services of the video-cassette, the tape producers will become increasingly sensitive to the demands of their market, and respond accordingly.

ABBOTT

acidyl®
(CHLORVYNOL)
ief Summary

:ations—Placidyl (ethchlorvynol) is indicated ıort-term hypnotic therapy in the menagement somnia.

raindications—Drug hypersensitivity end por-e.

ings—Not recommended during the first end ıd trimester of pregnancy. Ceution patients ossible combined exaggereted effects with ıol, barbiturates, tranquilizers or other CNS ıssants. Exaggerated effects might result in ng of vision, parelysis of eccommodetion end und hypnosis. Ceution patients concerning ıg e motor vehicle, opereting mechinery, or hazardous operetions requiring alertness af-ıking the drug. ADMINISTER WITH CAUTION ATIENTS WITH SUICIDAL TENDENCIES AND IOT PRESCRIBE LARGE OUANTITIES OF THE G. Adjustment of the dosage of oral anticoag-s might be necessary when beginning ethchlor-therapy, during therapy, or after stopping py. This drug is not recommended for use in en. PLACIDYL HAS THE POTENTIAL FOR DEVELOPMENT OF PSYCHOLOGICAL AND ICAL DEPENDENCE. INSTANCES OF SE-WITHDRAWAL SYMPTOMS, INCLUDING VULSIONS AND DELIRIUM CLINICALLY SIM-TO THOSE SEEN WITH BARBITURATES, BEEN REPORTED IN PATIENTS TAKING ULAR DOSES AS LOW AS 1000 MG. PER DAY t A PERIOD OF TIME WHEN THE DRUG WAS DENLY DISCONTINUED. PROLONGED AD-STRATION OF THE DRUG IS NOT RECOM-DED. Addiction-prone patients or those who kely to increase dosages of the drug on their nitiative should be observed for evidence of or symptoms which may indicate possible withdrawal or ebstinence symptoms. Signs ymptoms associated with withdrawal and ab-ıce include unusual enxiety, tremor, ataxia, ıg of speech, memory loss, perceptual dis-ıs, irritability, agitation and delirium. Other vell defined signs and symptoms, not neces-due to withdrawal and abstinence, may in-anorexia, nausea or vomiting, weakness, ess, sweating, muscle twitching and weight Abrupt discontinuance of Placidyl following ıged overdosage may result in convulsions elirium.

utions—Toxic amblyopia has been reported long-term continuous use of ethchlorvynol. ınent visual defects have been observed, al-ı emblyopia has improved after discontinua-f the drug. Drug dosage should be limited derly end debilitated patients to the smallest ve emount. If pain is present, this drug d only be given if insomnia persists after s controlled with analgesics. Caution is ad-in prescribing the drug for patients who are treated with either MAO inhibitors or anti-ssants. Transient delirium has been reported ne combination of Placidyl and emitryptyline. dosege should be reduced if prescribed for ts receiving MAO inhibitors or antidepres-Caution should be exercised in patients mpaired hepatic or renal function. Patients espond unpredictably to barbiturates or alco-r who exhibit excitement and release of inhi-in association with such agents, may also in this way to Placidyl. Rarely, patients may t symptoms suggestive of an unusual sus-llity to the drug; such as prolonged hypnosis, nd muscular weakness, excitement, hysteria, cope without marked hypotension. Trensient ess or ataxia may occur.

se Reactions—Hypotension, nausea or vom-gastric upset, aftertaste, blurring of vision, ess, facial numbness, and allergic reaction d by urticaria have been reported following yl edministration. Mild "hangover" and symp-of mild excitation have occurred in some s. There have been rare reports of cholestatic ce occurring in patients taking ethchlorvynol. cases of thrombocytopenia have been re-In petients receiving ethchlorvynol. 307454

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Not recommended during the first and second trimesters of pregnancy.

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THE JOURNAL

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Remarks by L. L. L. Golden
Public Affairs Counsel
Before The Medical Association of the State of Alabama
Mobile, Alabama April 13, 1973

The Private Sector In An Environment Of Rapid Change

We are living in a period of sharp, rapid and even fundamental change in our society. In the lives of none here have the movements of change been so quick, so full of imponderables, so demanding of adjustment. The days of easy and slow movements of our social structure, often stretched over long time spans, are gone.

Short days ago few would have predicted the amazing shift of America's position in its relations with the People's Republic of China and that nation's entry into the United Nations, least of all that an American President would travel to China to break the isolation between those two countries so antagonistic in social philosophy and basic economic belief. Short days ago few would have believed possible that this country and the Union of Soviet Socialist Republics would move so solidly toward long-term peace and commerce.

Who would have guessed short days ago, that Japan and Communist China would be developing new relationships; or that West Germany would be moving toward amity with East Germany and other Warsaw pact countries; or that U. S. A. and Japan would break the arrangements in force since the end of World War II so drastically; or that North and South Korea would be on the way to peaceful re-unification; or that the nine Common Market countries would be tending toward a European union; or that Communist China would propose talks with Formosa. Or that the new nationalism would be such a potent force in Latin America, the Middle East and Canada.

At home the campuses are no longer erupting in violence but much of the student antagonism is still irrational, a good deal of it nihilistic. The drive against the status quo is still potent without any clear view of the promised land. And there is an important body of opinion, not only amongst students but amongst faculty members, that the present system must be destroyed; for no matter what the results may be, it would be better than what we have today. Quiet on the campus does not mean that students accept established institutions or that student antagonisms are only a passing phase. It is far more than that, for there is deep dissatisfaction with our very system of government. Our whole social structure is under attack.

We also see ahead a new kind of confrontation emerging. Opinion studies show that while many young people continue to move away from the basic, long-held values of our society toward a new life-style and loosening moral practices, others are tending in the opposite direction. We see more

and more an emerging conservatism, a firming of opposition to the new mode of much of youth and an impatience, and even anger at the assaults on basic American institutions and the traditional values of the nation.

It is clear that social conflict is not over, that the future will not be a placid sea. Clearly we are in an era of changing social values which will not be realized without harsh conflict.

It is in this context that our institutions have to function. And it is in this context that leadership must chart its course.

Now it is an old story for thoughtful students of public affairs that in the final analysis it is the public which is sovereign. We know by now, and the doubters just don't know their history, that public opinion is king, that institutions operate only through the will of the public.

Let me put it another way. Corporations are incorporated according to the laws of the states and subject to the legislation of other jurisdictions. The very laws of incorporation were put into effect by legislatures. Those legislatures were elected by voters. And the same voters can elect new legislators who can change the rules and laws under which corporations operate. There is nothing fixed in laws. Just as they were enacted they can be changed by the same legislative bodies which drafted the laws in the first place.

Legislators must heed the voices of their voters or they will all become ex-legislators. So, in order to function under laws which are not punitive, every corporation must have public consent. It is sad to say that it is hard to find major legislation which restricts the operations of a corporation which did not come as a result of actions by corporations which the public believed was not in its interest.

And it is true in every nation where the voter has the freedom to elect his representatives to public office, there is universal suffrage.

It is during periods of deep social unrest, when national moods are a complex of frustration, anger and disillusionment that all institutions are endangered. Governments, churches, universities, labor unions, business, trade associations and professional organizations are all affected by the conflicting emotions of a nation in the midst of a search for answers difficult to find in a world wracked by violence and shot through with cynicism.

Large organizations need stability. But when there is turmoil leaders who are unable to assess the tenor of the times are in danger of making decisions which can be harmful and even destructive. It is essential for survival to have an understanding of the national will and an ability to bend with gusts of irrational emotion without the destruction of basic principles. And what is true for government, church, college, union and business is also true for professional groups.

Alert observers of public moods are well aware of all this and they are always in search of the signs of major change that could affect them or even engulf them. Their experience with shifting public attitudes and their reading of history forewarn them that the views of those who are *not* political leaders, clergymen, college presidents, union chiefs, corporate executives, or leaders in the professions are of immense value in assessing change.

That is one of the reasons they constantly look beyond their own organization, beyond established leadership, to see if they are taking the correct course which will help them make the necessary accommodations to assure survival. To them there is no doubt that the cork of stability is out of the bottle. And we must face the fact that there is no forcing it back in.

A great deal of good can come out of this turmoil. But unless we understand what is

going on, unless we can properly assess these new public attitudes, unless we make our necessary adjustments, much that is basic to a good society can be swept way. And how the private sector acts in this period will have a serious influence on whether our economic and political systems themselves survive.

Those sitting on top of the heap generally don't like change. They are doing fine as it is. But there are others who are dissatisfied with things as they are. These cannot be ignored. They must be taken into account. Unless their warnings are heeded, there will be trouble for those on top. What is more, unless voluntary action is taken to make necessary changes, others are going to force them. For it must never be forgotten that the public is sovereign. The private sector does not exist by divine right. It exists only by the charter given it by the public. And let us never forget that those who elected the legislatures which passed the laws under which organized elements of the private sector function, can elect new legislatures and change those laws.

It is essential to be alert to criticism; not to attack the critics, but to learn what the public is thinking. By being alert, by understanding changing moods, by trying to gauge the depth of new modes, the private sector can anticipate what the public is going to insist on changing so that it can make those changes without destroying the fundamental structure on which it is built.

Let me put it another way. The best way for a boxer to get his head knocked off is to walk straight into a hard right. But if he takes the punch on his glove and rolls with it, the chance of losing his senses, not to speak of his head is a great deal less. The private sector has to learn to roll with the punch. History is full of the ruins of institutions that couldn't adjust to change. And the dinosaur, big, lumbering, powerful and heavy of foot disappeared. He just couldn't make his adjustment to his environment.

One of the reasons that American capitalism is able to survive is that it is above all realistic. It can meet change. It left ideology to the ideologues and went ahead to new paths in which, still preserving the profit system, it moved to meet the social needs of the nation. It is the best example I know of rolling with the punch. For if business had not learned that it must accept its obligations to society as a whole while continuing to make a profit, we would not today have a mixed economy, with the private sector valuable and strong. We would instead have some other system, resembling either that of Italy under Mussolini or that of the U. S. S. R. By learning to live within its changing environment American capitalism has been able to survive and continue to contribute to the improving quality of national life.

Business has its troubles today of course. It will continue to have them so long as it does not heed the demands for changes in our social structure. And the longer business abuses continue so long will we have new legislation regulating business. The new laws affecting the automobile industry, the pharmaceutical business, packaging, lending, the additional long list of laws to protect the consumer, are only the beginning unless corporate managers realize these are not brought on by clamoring politicians or expose journalists. Business asks for governmental regulation every time it continues what is patently an unfair practice.

But business is not the only segment of the private sector that must adjust to change, or even facilitate it. It is true of the colleges, of unions, of professional organizations, of all the other elements which help make up that large section of the nation, the private sector. And those who believe that the private sector has made and can continue to make an invaluable contribution to the common weal must be doubly concerned to assure that it is not so restricted, so swallowed up, that we end up with no private sector.

Thoughtful leaders have no choice but to address themselves to the meaning of social

upheaval. They see institutions changing under the hammer of public demand translated into governmental actions. The instant demand for instant change is so pervasive that no organized community, no institutions, can change quickly enough to meet the empassioned, emotional demands of those who cry out loudest.

Let me cite two examples of change in a short period. Few of us here are so young that we do not remember the belching smoke stack as the sign of progress. It was pictured as a symbol of growth, of health of the nation. Now industrial smoke is considered a national menace and those industries that continue to foul the environment are treated as public enemies. Once the job the plant provided was more important than the treatment of its waste. Today a good job is not enough. The public demand is for both a good job and clean air, pure waters, as well as the most judicious use of natural resources.

And here I speak of the reasonable demand, not of those who would ban the development of our natural resources, banish the motor car and end economic growth.

Let us turn to the matter of national health. It is not so long ago that any form of public or private health insurance was considered too dangerous a topic to touch and by many condemned as contrary to good medical practice as well as to the survival of our economic system. Now it is pretty generally accepted that some kind of universal health insurance is necessary and that some type of financing by the government is needed as well. Of the half dozen important health plans now being considered, that of the Nixon administration, the Senator Javits plan, the one proposed by the American Medical Association, the Senator Kennedy proposal, the insurance companies' plan, and the one sponsored by the American Hospital Association—all include governmental involvement.

If any conclusion can be drawn from this it is that times have so changed in less than a single generation that health care is considered a fundamental right of everyone, regardless of his ability to pay. Labor unions, hospital administrators, the medical profession, insurance executives, business associations, and the general public all see eye to eye: that a universal form of medical care is essential for the nation, even though at present 180 million people are covered by health insurance of some kind. And that figure too must be put in this perspective: a generation ago only some 12 million in this country were covered by health insurance.

No longer do responsible groups or individuals oppose universal health care. The issue now being debated is the extent of involvement of the private sector in a national scheme.

And as part of this we must assure that the private practice of medicine will be preserved; that physicians do not become civil servants; that the individual has the choice of physician; that the thrust of good medical practice is preserved against those whose zealousness for a universal plan of medical care may destroy the very base of it—private physician.

Government has never been more sensitive to public anger than it is today. We see it in the long list of new consumer legislation passed by Congress and in the process of being passed. Nor is it sensible to blame the politicians. They too have their problems, even as has the leadership of those elements which make up the private sector. But no matter how much some people may dislike it, the fact remains that in a democratic society the will of the majority does prevail. Public opinion is king and is bound to remain so. We have seen cases in business, in unions, in universities, in many other fields that when the public insists that it is not being well served by an institution, that institution has to change or it will begin to die.

This does not mean that the leadership of the private sector must not present its case to the pubic, not one part of it, but

all. It has as duty to present its case and present it intelligently, soundly, using all legitimate means of communication. But it better make certain that its case has solid merit, that it is truly in the public interest, not alone in the interest of the industry, or college, or the union, or the professional group.

The public interest and the interest of a special group often coincide. And when it does it has a good case to go before the public. But when the special and public interests are in conflict, the most skilled practitioners in communications cannot succeed. They cannot make a good case out of a bad one or force people to believe that day is night.

The base of a good communication program is good performance. That is the way to public consent. Tricks or gimmicks, or sleight of hand never did take the place of good performance and never can. In the long run there is only one way to gain public acceptance and that is to serve the public interest. Then communicate what is being done, remembering that the general public is interested in its welfare, not the welfare of the special group which advocates a course of action which serves the special group alone.

The fact that you believe you are right, that your heart is pure is not enough. The public must be convinced that what you advocate is in *its* interest, not just in yours or what *you* think is the public interest. That you are suffering the slings and arrows of outrageous fortune is clear enough. Some of that is due to the spirit of the times. Some of it is due to conditions which no longer exist; some of it is due to those who do not believe there should even be a private sector; and some of it is due to the fact that the nation has not yet decided the course which medical care will take for the country as a whole. And until those adjustments are made the hue and cry will continue.

When someone comes before you and tells you that he can change public opinion by a special stroke of genius, that he has some kind of black magic at his command, then make sure your wallet is tightly zippered deep in your pocket. Save your money, or give it to the Salvation Army. It will serve your cause much better than paying it to the man who claims that he can change public opinion by the wave of a wand. There is no such thing. Dealing with public opinion is hard, demanding work based on two basic elements, and those two alone: performance in the public interest and effective communication of that performance. Public consent cannot be engineered. It can only be earned by good performance.

There is a direct relation in our society between every element of the private sector and its social environment. None can operate in a vacuum. It is then imperative that private sector leadership be involved in seeking solutions to our national ills if the country is not going to be torn apart so badly there will be no private sector at all. The public expects the private sector to do its part for it is now obvious that governments cannot do it alone.

Political leader follows political leader in declaring that the private sector can provide answers to urban decay, to minority unemployment, to poor housing, to inadequate mass transportation, to inferior education, to destructive welfare systems.

The inner cities must be saved from their headlong plunge into total chaos. The private sector has the talent, the skill, to develop on the job training so that the deprived, the ill-educated, the bottom rung of the poor can find jobs. The destructive cycle must be broken, the cycle of unemployment because of lack of education and training; welfare payments because of unemployment; crime because of frustration and hate.

The urbanization of the nation has brought new and complex problems with which it has not been able to cope effectively. Seventy per cent of the population is now in nonrural areas. With the movement to the urban

centers in flux, the core areas have been left to the most depressed groups.

How dangerous this is, is obvious. How this imperils those who have escaped is just as clear. Our cities have to be made fit for all to live in, not just for those at the bottom. And until the cities have been made fit for the rest to live in, not just ameliorated jungles for the hopeless, there will be no solution.

This is a job for business, for unions, for colleges, for churches, for the professional association. No man, no matter how cultivated, is safe until all are safe. No peace will come out of our agony until our inner cities, which are our last frontier, can be made habitable not just for the poor but for all.

Our group problems will not grow fewer until the problems of the nation as a whole are diminished. We need not only more physicians, but better hopsitals. We need not only cleaner air but cleaner streets. We need not only unpolluted rivers, but decent schools. We need not only safe drugs and sound nutrition, but jobs for the hard-core unemployed, and good housing. These are the responsibilities of all, but particularly a profession which has struggled to improve the health of the nation, which has served it so notably.

In 1906 it was the American Medical Association which brought direct pressure on Congress to enact the Pure Foods and Drugs Act to protect the consumer.

It was Dr. Charles A. L. Reed, chairman of AMA's Legislative Council who told Senator Nelson W. Aldrich of Rhode Island, the Senate leader, that 135,000 physicians, organized locally into 2,000 county units, would try to persuade their patients to influence Senators, and would actively campaign if necessary, to pass a law to protect the public.

Wise new leadership is moving to make the adjustments to our changing social structure and its rapidly altering environment. There is a deep reservoir of good will in the nation for the medical profession. Its leaders are highly regarded by the community. Its members are modern in practice. The country sorely needs them in its hour of trial. The challenge cannot be sidestepped.

That powerful segment of the private sector, big business, is working diligently, often creatively, to find a path out of the massive, accumulated dank, overgrowth which now hides the sun. The professional organizations can do no less. And in the forefront of these should be the respected profession dedicated as it is to the nation's health—all of it.

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There is no vaccine available for monkeypox disease. Having the disease or being vaccinated with variola vaccine does not bestow immunity to monkeypox virus.

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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (> 5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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Family Doctors Making Comeback

Twenty-five years ago, an organization of family doctors was founded which many regarded, one observer noted, "as a last-ditch stand against the inevitable demise of the family doctor."

Well, a funny thing happened on the way to the funeral.

That organization, now known as the American Academy of Family Physicians, has more than 32,000 members; family practice has become a medical specialty, and medical students from New York to California are saying, in increasing numbers, that they want to be family doctors.

"The amount of interest is phenomenal," says Dr. Eugene S. Farley, director of the family medicine program at the University of Rochester, New York, School of Medicine and Dentistry. "I wish we could take in more." There are 90 students in the medical school—50 are taking family practice electives.

"In 1969, general or family practice was the choice of less than 10 per cent of freshman medical students in California; in 1972, over a third chose general or family practice," the California Medical Association reports.

A number of medical school deans also report strong interest in family medicine, although some caution that it may be too early to tell if such interest reflects a genuine turning point in career views.

However, these are the facts:

Family practice became a medical specialty in 1969. Now, there are 133 approved residency programs in hospitals throughout the nation, and 35 medical schools have departments or divisions of family practice. As of last July 1, there were 1,015 residents in training. The growth trend is indicated by class figures—there are only 189 third-year residents, representing only 36 per cent of available class places; but for the second-year the figures are 354 and 55 per cent, and for the first-year, 470 or 81 per cent. In other words, family practice is coming on strong.

All of which, medical experts agree, is good news for the American public, since most of its medical needs can be met by a family doctor. There is infrequent need of the specialists who have long dominated medicine, or need of hospitalization.

Dr. Walter C. Bornemeier of Chicago, himself a surgeon, put it this way when he was president of the American Medical Association in 1970:

"What we need, what this nation needs, is education of our medical students to take care of people who have their shoes on, not educated solely to care for people who are wearing hospital gowns."

Doctors in and out of family practice agree that more family physicians (formerly known as general practitioners) should mean two things to Americans: easier access to medical care, and, probably, cheaper care.

"There are two basic problems associated with today's doctor shortage," said Dr. J. Jerome Wildgen of Kalispell, Montana, immediate past president of the American Academy of Family Physicians. "One, the inability to obtain a doctor when one is needed; and, two, the demand for health services—primarily hospital services—has forced the cost of health care to unprecedented heights."

Training more primary-care doctors would do much to relieve both problems, he said.

"The first, availability, would be attacked by not just producing more doctors, but doctors who specialize in the whole person," Dr. Wildgen said. "The second, cost, would be attacked from the standpoint that family doctors focus on keeping their patients ambulatory and out of the hospital."

There is an old joke about a doctor, trying to make a diagnosis, asking the patient, "You ever had this before?" When the patient says yes, the doctor replies, "Well, you've got it again."

But that anecdote carries some serious truth: If your doctor knows that a complaint IS due to something he previously diagnosed —perhaps even something emotional—you are not likely to be put through many expensive tests, and unnecessary worry.

Dr. C. H. William Ruhe, director of the AMA's Division of Medical Education and staff secretary of the Willard Committee, also thinks more family doctors will solve much of what has been generally called, "the health care crisis."

"I believe if we had more, the conception of a doctor shortage would disappear," he said. "As I travel and talk with people and ask them what they want of medicine, they tell me, 'A doctor I could call on at any time, to supervise my health and that of my family.' "

If family medicine is so good, then why did it all but fade away?

"The decline was caused by a combination of the increasing amount of medical knowledge and the growth of medical specialties," Dr. Ruhe said. "There was tremendous interest in teaching traditional specialties in depth and almost complete neglect of education of the broad specialist, the generalist. It clearly was the fault of education . . . but it also was inevitable, given the categorical nature of financial support for research and education."

The emphasis was on research, and most government money was available only to support research, said Dr. Ruhe, who formerly was associate dean at the University of Pittsburgh medical school.

"We produced a whole generation of faculty members who were trained, and who lived, in the belief that the greatest good they could do in medicine was to engage in scientific investigation. Consequently, they offered this view to their students.

"There also was a feeling among some students that perhaps they couldn't handle all the new knowledge and had best try to handle just some of it. In addition, students saw that the status, the rewards, and the relatively shorter hours, were in the narrower specialties."

By 1960, there were only 75,000 general practitioners in the nation, compared with 112,000 in 1931. By 1967, it was down to 60,000. By that year the Willard Committee, chaired by Dr. William R. Willard of Lexington, Kentucky, had completed its two-year study of family practice. The panel said:

"The committee believes medicine needs a new kind of specialist, the family physician who is educated to provide comprehensive personal health care. Preparation of large numbers of such physicians is essential, if the public is to receive maximum benefits from American medicine."

About the same time, a wave of social consciousness was sweeping America. Concern for the sick, the needy and the consumer aroused the young, including medical and pre-medical students.

How much a factor this has been in reviving family practice is subject to conjecture. But Dr. J. Hutchinson Williams, assistant dean at Ohio State University medical school, said he believes "a change in social consciousness, with less concern about security and more about the quality of life and care of people," explains the resurgence of interest.

However, in view of the Willard Committee, there obviously was no generation gap in regard to what was needed.

One of those stirred to action was a young physician fresh out of internship at St. Louis City Hospital.

"All of our schools were training specialists and no one was going out to take care

of the people," said Dr. Glen E. Tomlinson of Lincoln, Illinois. "If you broke a bone, you could get it set; and if you had a heart attack, you could get into a coronary care unit. But if you just needed a doctor to take care of you, it was almost impossible to get one.

"The patient was put in the position of just about deciding what was wrong with him, in order to tell which doctor he should go to."

Dr. Tomlinson got up at an Illinois State Medical Society meeting in 1968 and introduced a resolution urging that state-supported medical schools in Illinois be required to develop family practice programs. Somewhat to his surprise, it was supported by the Society and ultimately adopted by the state legislature.

"I had no idea I would be a part of the development," Dr. Tomlinson said, "but I served on the committee which designed the programs, and they asked me if I wanted to direct one, so here I am."

"Here" is Cook County Hospital in Chicago, where Dr. Tomlinson heads the Joint Family Practice Program of the University of Illinois and the hospital, a residency program which began in December, 1971. It eventually will have 60 residents in this new kind of training.

Traditionally, medical school graduates served big city hospitals where they treated anyone who came in the door, seldom following up on a patient or even seeing the same patient twice.

But at Cook County, the residents will have "offices" and the patients they are assigned will stay with them.

"They may have up to 200 families," Dr. Tomlinson said. "And they will carry those patients all through their three-year residency. They will deliver babies, and take care of those babies afterwards."

No matter which practice the resident may be assigned to—surgery, pediatrics, etc. —he will continue to follow his patients in the Model Family Practice Unit.

Such a model is vital, medical educators say, in order for the new doctors to get a real grasp of office-type, family practice. This is a radical departure from the usual training, which was described in the Willard Report like this:

> "Clinical teaching at most medical schools revolves almost entirely around patients who are hospitalized for acute illness. There is little opportunity for the student to follow the course of chronic illness, to become familiar with the long-term health problems of patients, or to see disease as it occurs in the community."

The residents will not only see patients with their shoes on in their "offices," but will get away from the hospital setting entirely, spending one-half day a week or more in a neighborhood clinic.

To gain what is called "core content competency," each resident will rotate among various disciplines in his first year.

He will spend four months in medicine; two in pediatrics, including the newborn nurseries; two in general surgery; two in obstetrics and gynecology and two in elective courses. While doing this, he will return to the Model Unit on regularly scheduled days to see his panel of families.

In either his first or second year, the resident also will spend a month in the emergency room service, which at Cook County Hospital is one of the largest in the nation. (He also will be on emergency call while on the various practices, such as obstetrics).

Most of the third year will be spent in the Model Unit, admitting and caring for members of his patient group as need arises.

Out of such training will come a man or woman who will be what the AMA's Dr. Ruhe calls "sort of a general manager of

medicine. He will handle all aspects of care —if it is something he can handle, which most of the time it will be. If he can't, then he will refer the patient to another type of specialist, but he will continue his relationship with the patient before and after the referral. His aim is to see that the patient gets the right kind of care."

In other words, not only does the modern FP concern himself with "is the family healthy?" but also with, "is the community healthy?" Pollution, lack of health services, poverty and other problems a town might have are all part of "community health."

(One bit of explanation—reference to the "modern" family doctor is not meant to take anything away from those family physicians in practice. The new FP will be just like the old one, for example, in "keeping up" with medical developments—the Academy of Family Physicians requires members to take 150 hours of accredited education every three years, and was the first medical group to make study mandatory).

Besides greater skills, today's family doctor differs in other ways from the oldtime GP. For one thing, the demands of continuing education are a factor in the growth of group practice, as opposed to the one-man office. A doctor practicing alone finds it extremely difficult to leave his patients for a couple of weeks of study at a medical center or meeting. Economic advantages—sharing the cost of modern, expensive equipment—and the advantage of handy consultation also make the group attractive.

"I would never go back to solo practice," Dr. Tomlinson said. "Ideally, I think there should be four doctors in a group. That's small enough so they all know each other's abilities, but you don't have a big management problem. That way, three can always be on duty while the fourth is studying or on vacation."

"We are training, along with our residents, ten nurse-practitioners," Dr. Tomlinson said. "I think the house call will become part of the expanded role of the nurse. Visiting nurse associations are already doing it to a degree."

Nurse-practitioners are a new type of health care professional, with special training beyond usual nursing courses. They not only *are* making house calls today, they are serving entire rural towns which have no physician (keeping in touch by telephone with doctors at a medical center miles away).

"The nurse can take a patient's temperature, blood pressure and in general do an adequate examination, then bring the report back to the office," Dr. Tomlinson said. "Or, if needed, she can call me from the patient's home and say he needs to be seen, or sent to the hospital. But I can see several patients in the time it takes to make a house call—and the nurse can do about all I could in the home situation, anyway."

Even in the office, they can handle many patients, he added. "For example, those on maintenance therapy. Say the patient is being treated for high blood pressure—the nurse can check his pressure, weight and so forth, and if everything is okay, she can send him home; there is no need for him to see the doctor. But if any of the pre-determined guidelines are abnormal, then the nurse can call in the physician."

With more family doctors in practice, and with their efficiency greatly increased by the use of nurses and other aides, the "doctor shortage" would indeed seem to be on the way out.

But will interest in family medicine continue?

Dr. Tomlinson thinks so, not only because of reasons given earlier, but for some purely pragmatic ones.

"A great part of it is common sense and recognizing that many specialties are full up," he said. "For example, a lot of surgeons are sitting around hospital locker rooms

(Continued on Page 38)

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(Continued from Page 36)

waiting for something to turn up. A lot more are doing family practice by necessity, rather than desire or training.

"And as for specialties in general—it's been proven that a well-trained family physician can adequately care for 80-85 per cent of all those who come to his office, and knows how to refer those who he feels need more specialized skills."

Dr. Ruhe of the AMA says, "If new doctors find that family practice can be a rewarding life, and I think they will, then we will be all right. But they have to be shown that life, through a model practice unit in their residency."

How many family doctors do we need?

"I personally believe that the AMA should make a strong pitch for a specific percentage of medical graduates each year to go into family practice. I am going to recommend in a new health manpower report that the AMA urge that at least 50 per cent of all medical school graduates enter primary care specialties in the years ahead."

Obviously, there are financial rewards in being a family doctor. But what else is there? Why does a student choose that field, and why does a physician remain in it?

"I just think it's the best way to serve the most people," said Silas Thomas, first-year student at Northwestern University medical school in Chicago. "And I don't mean that in the way of mass production, or making a lot of money—but in the sense of not having to turn anyone away, telling them that 'I only treat throats' or something like that."

Mr. Thomas, a black man, grew up on Chicago's south side and thus has seen the doctor shortage in its most acute form, as that area has been called a "medical wasteland."

Explains Dr. Tomlinson:

"Well, as a specialist, you know you can be a good technician, that's your training. But you really need to know a little about the patient. And to me, the real personal satisfaction in medicine is knowing the patient, sitting down with him and talking about his problem and coming up with a solution.

"There is nothing like hearing a patient say, 'I feel better.' It makes you feel good. It makes all the stress and concern worthwhile."

New Sports Medicine

Sports medicine used to consist largely of a trainer with a bottle of liniment and some tape. No more. It has reached the point where an Institute of Sports Medicine and Athletic Trauma has been opened, at Lenox Hill Hospital in New York City. There are about eight million injuries each year in sports, says the Institute's director, Dr. James A. Nicholas. And although there are many programs concerned with sports medicine, there is little coordination or research, Dr. Nicholas said. The Institute hopefully will provide that. Dr. Nicholas is well-qualified in the field—he is team physician for the New York Jets and the man of the knocked-about knees, quarterback Joe Namath.

AMA-ERF Donations

U. S. medical schools are getting $963,823 in grants this year from the American Medical Association-Education and Research Foundation, according to Dr. Kenneth C. Sawyer of Denver, foundation president. The AMA-ERF is funded by donations from doctors, and their wives through the AMA Woman's Auxiliary. Since 1951 when the program began, a total of $23,843,234 has been distributed to medical schools, Dr. Sawyer said. In addition, the AMA-ERF has guaranteed more than 48,000 loans, totaling more than $50 million, to medical students, interns and residents. A special, interest-free loan program is available to especially needy individuals.

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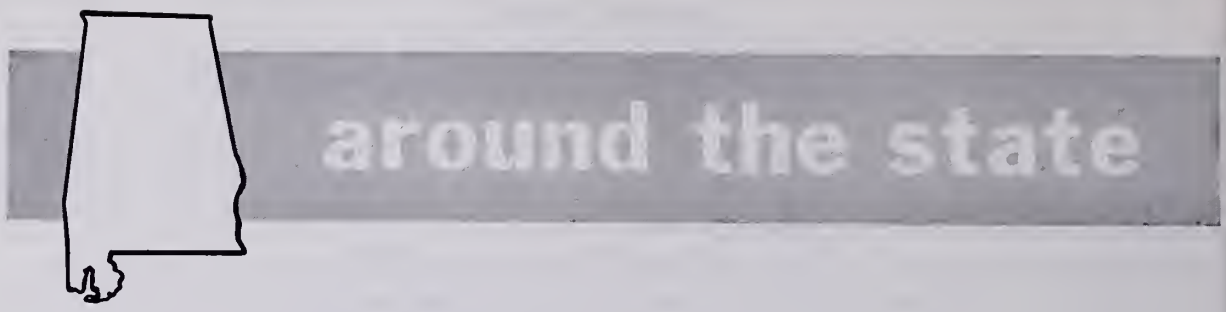


Vital Statistics

NEW MEMBERS

Covington County

Daniel, Robert Raymond, b 31, mc Ala. 60, sb 61, P. O. Box 1435, Andalusia, Alabama 36420. GP.

Daniel, Sara Jo, b 32, mc Ala. 59, sb 59, P. O. Box 1435, Andalusia, Alabama 36420. GP.

Jefferson County

Chastain, Truman Leroy, b 36, mc Indiana 66, recip. Indiana 72, 1515 6th Avenue South, Birmingham, Alabama 35233. GP.

Chu, Young-Kwon, b 38, mc Soo Do, Seoul, Korea 64, Limited Lic. 72, 1919 7th Avenue, South, Birmingham, Alabama 35294. Anes.

Coker, Harvey Guy, Jr., b 23, mc Tenn. 53, recip. Tenn. 69, 1016 18th Street, South, Birmingham, Alabama 35205. Oph.

Eisenhardt, Otto Franz, b 33, mc Ala. 60, sb 61, 7005 Fifth Avenue, South, Birmingham, Alabama 35212. P.

Pitts, James Randall, b 43, mc Ala. 69, recip. NBME 70, 1919 7th Avenue, South, Birmingham, Alabama 35294. Oph.

Russell, William Frazier, IV, b 42, mc Ala. 69, recip. NBME 70, 1529 North 25th Street, Birmingham, Alabama 35234. R.

Schencker, Bernard, b 34, mc Ill. 59, recip. NBME 72, 619 19th Street, South, Birmingham, Alabama 35233. R.

Spencer, Joseph Terrell, b 43, mc Ala. 68, recip. NBME 69, 1919 7th Avenue, South, Birmingham, Alabama 35294. I.

Stanley, Alfred William Hugh, Jr., b 39, mc Fla. 66, recip. Ga. 71, 1919 7th Avenue, South, Birmingham, Alabama 35294. I-C.

Woodall, William Carvel, Jr., b 39, mc Ala. 65, sb 66, 619 19th Street, South Birmingham, Alabama 35233. NS.

Woodman, Thomas David, b 36, mc Ala. 67, recip. NBME 68, 800 Memorial Drive, Bessemer, Alabama 35020. Or.

Macon County

Calhoun, Thomas Jones, b 24, mc Meharry 48, recip. S. C. 56, 319 Fonville Street, Tuskegee, Alabama 36083. S.

Madison County

Lienke, Roger Irving, b 22, mc Minnesota 46, recip. Minnesota 73, 810 Franklin Street, S. E., Huntsville, Alabama 35801. GP.

Tallapoosa County

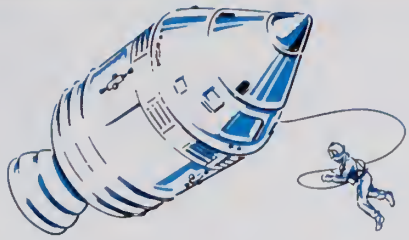
Heidepriem, Robert William, b 19, mc College of Osteopathic Medicine & Surgery Missouri 63, recip. Iowa 69, P. O. Box 268, Alexander City, Alabama 35010. Osteo.

Tuscaloosa County

Carpenter, Earl Lee, b 28, mc Tenn. 63, recip. Miss. 72, 404 10th Street, Tuscaloosa, Alabama 35401. Oph.

Janes, Robert Grant, b 02, mc Western Ontario 26, recip. Mich. 72, 7 R Northwood Lake, Northport, Alabama 35476. R.

(Continued on Page 43)



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Shotts, James Edgar, Jr., b 40, mc Ala. 65, sb 66, 921 3rd Avenue, East, Suite 104, Tuscaloosa, Alabama 35401. ALR.

Whitley, John Calvin, Jr., b 38, mc Ala. 64, sb 64, 225 University Blvd., East Suite 103, Tuscaloosa, Alabama 35401. S.

Walker County

Edmondson, Marshall Gray, b 44, mc Miss. 71, recip. Miss. 72, Jackson Clinic, P. O. Box 1389, Jasper, Alabama 35501. GP.

MEMBERS DECEASED

Crenshaw County

Foster, James Oscar, Luverne, Alabama, Deceased

Jefferson County

Carter, Melson Barfield, Birmingham, Alabama, Deceased 5/26/73

Harkey, Michael Erin, Birmingham, Alabama, Deceased 5/24/73

Ramsey, Joseph Hawthorne, Birmingham, Alabama, Deceased 5/27/73

Perry County

Dawson, James R., Milledgeville, Ga., Deceased

CHANGES OF ADDRESS

Dallas County

Ross, Carlos James, present Selma to P. O. Box 557, Selma Medical Center, Department of Radiology, Selma, Alabama 36701.

Etowah County

Gillespie, J. P., Jr., present Gadsden to 1121 Chestnut Street, Gadsden, Alabama 35901.

Houston County

Cleveland, Richard Doss, present Dothan to 1507 West Main St., Dothan, Ala. 36301.

Jefferson County

Beck, Jere LeMay, Fairfield, to Elm Street Road, Troy, Alabama 36801.

Finney, James Owen, Jr., Mississippi, to 2608 10th Street, South, Birmingham, Alabama 35205.

Huber, Francis C., Jr., present Birmingham to 3835 South Cove Drive, Birmingham, Alabama 35233.

Packard, John Mallory, present Birmingham to University of Alabama, P. O. Box 6291, University, Alabama 35486.

Ritchey, Hardin McLean, present Birmingham to 8915 4th Avenue, South, Birmingham, Alabama 35206.

Lamar County

Smith, Charles Elden, present Vernon to P. O. Box 398, Vernon, Alabama 35592.

Lauderdale County

Pritchard, Charles David, present Florence to 216 South Marengo, Florence, Alabama 35630.

Madison County

Maynor, Robert C., Jr., Birmingham to 1402 Woodmont Avenue, S. E., Huntsville, Alabama 35801.

Mobile County

Lofton, Joseph Edgar, present Pensacola, Fla. to 4620 Balmoral Drive, Pensacola, Fla. 32504.

Tuscaloosa County

Guin, James Claude, present Tuscaloosa to 225 University Blvd., East, Suite 305, Tuscaloosa, Alabama 35401.

Lord, Jethro Dean, Jr., present Tuscaloosa to 535 G. River Road, East, Tuscaloosa, Alabama 35401.

Santina, Henry D., present Tuscaloosa to P. O. Box 3043, East Side Station, Tuscaloosa, Alabama 35401.

(Continued on Page 46)

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T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
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1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.
2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* 49:855-64, 1970.
3. American Druggist BLUEBOOK, March, 1971.

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Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

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Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

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(Continued from Page 43)

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NEW TELEPHONE NUMBERS

Calhoun, T. J., Macon	727-0400
Carpenter, E. L., Tuscaloosa	345-3140
Chastain, T. L., Jefferson	933-9211
Chu, Young-Kwon, Jefferson	934-4696
Coker, H. G., Jr., Jefferson	933-3075
Daniel, R. R., Covington	222-6551
Daniel, Sara Jo, Covington	222-6551
Edmondson, M. G., Walker	387-2161
Eisenhardt, O. F., Jefferson	838-1203
Foy, R. E., Coffee	347-2233
Gillespie, J. P., Etowah	546-6213
Heidepriem, R. W., Tallapoosa	234-4295
Hudson, A. R., Walker	384-5467
Janes, R. G., Tuscaloosa	759-3100
Lienke, R. I., Madison	539-7931
Pitts, J. R., Jefferson	934-4330
Russell, W. F., IV, Jefferson	871-8530
Schencker, Bernard, Jefferson	933-8101
Shotts, J. E., Jr., Tuscaloosa	758-9041
Spencer, J. T., Jefferson	934-4011
Stanley, A. W. H., Jr., Jefferson	871-7825
Whitley, J. C., Jr., Tuscaloosa	345-2777
Woodall, W. C., Jefferson	934-4654
Woodman, T. D., Jefferson	428-6271

MEMBERS REINSTATED

Macon County

Dowe, Calvin Ray, b 25, mc Meharry 55, sb 56, 108 Reed Avenue, Tuskegee Institute, Alabama 36083.

Morgan County

Brogdon, Paul P., Jr., b 22, mc Arkansas 45, recip. Arkansas 70, P. O. Box 1066 Hartselle, Alabama 35640.

CHANGE OF SPECIALTY

Etowah County

Gillespie, J. P., Jr., 1121 Chestnut Street, Gadsden, Alabama 35901. G-Ob.

MEMBERS REMOVED

Jefferson County

Barcia, Alberto, Birmingham, Alabama 35294 Transfer to Nonmember

Bashinsky, Leo M., Birmingham, Alabama 35209, Transfer to Nonmember

Bush, Stephen T., Johnstown, Pa. 15905, Moved from State

Cunningham, Russell D., Birmingham, Alabama 35294, Transfer to Nonmember

Farmer, Thomas A., Jr., Birmingham, Alabama 35294, Transfer to Nonmember

Foft, John W., Birmingham, Alabama 35233, Transfer to Nonmember

Glasser, Lewis, Birmingham, Alabama 35294, Transfer to Nonmember

Hinkley, Clark M., Birmingham, Alabama 35294, Transfer to Nonmember

Ingle, Leo R., Jr., New Orleans, La. 70124, Moved from State

Jackson, George B., Birmingham, Alabama 35233, Transfer to Nonmember

Kent, Sidney P., Birmingham, Alabama 35295, Transfer to Nonmember

Koschmann, Edgar B., Birmingham, Alabama 35294, Transfer to Nonmember

Lassiter, Kenneth R., Birmingham, Alabama 35205, Transfer to Nonmember

Lewis, Roger K., Daytona Beach, Fla. 35018, Moved from State

Matthews, James C., Jr., Fairfield, Alabama 35064, Transfer to Nonmember

McCaslin, Dan L., Ft. Wayne, Indiana 46805, Moved from State

(Continued on Page 48)

Doing little things better

caring better for his basic needs, less confused in his thinking; no great accomplishment for most people, but a significant advance for the patient with cerebral arteriosclerosis*

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Hydergine®

SUBLINGUAL TABLETS containing 0.167 mg. dihydroergocornine methanesulfonate, 0.167 mg. dihydroergocristine methanesulfonate, and 0.167 mg. dihydroergokryptine methanesulfonate

helps patients with cerebral arteriosclerosis do little things better

The usual dosage is four to six sublingual tablets daily. The patient's improvement with Hydergine is usually demonstrated in four to six weeks. Some nasal stuffiness due to adrenergic blockade, transient nausea or gastric disturbances have been reported with high dosages.

***Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indication as follows:

"Possibly" effective: The treatment of cerebral arteriosclerosis and dizziness, mood changes, nocturnal cramps, and paresthesias in the aged.

Final classification of the less-than-effective indications requires further investigation.

72-438R

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ

(Continued from Page 46)

Moore, William J., Birmingham, Alabama 35233, Moved from State

Owens, Arthur H., Jr., Birmingham, Alabama 35205, Transfer to Nonmember

Pardue, William O., Fairfield, Alabama 35064, Transfer to Nonmember

Polt, Sara S., Birmingham, Alabama 35233, Transfer to Nonmember

Poole, Seth W., Birmingham, Alabama 35205, Transfer to Nonmember

Scruggs, Thomas M., Birmingham, Alabama 35234, Moved From State

Taylor, Charles B., Birmingham, Alabama 35233, Transfer to Nonmember

Turnam, Alfred E., Birmingham, Alabama 35233, Transfer to Nonmember

Ward, John L., Columbia, S. C. 29204, Moved from State

Yake, Ronald F., Huntington, Indiana 46750, Moved from State

Limestone County

Pennington, William S., Athens, Alabama 35611, Transfer to Nonmember

Montgomery County

Garrick, Jean, Birmingham, Alabama 35216, Transfer to Nonmember

Kocour, E. J., Montgomery, Alabama 36108, Transfer to Nonmember

Thomas, Marcus C., Montgomery, Alabama 36111, Transfer to Nonmember

Morgan County

Oliver, Robert K., Tallahassee, Fla. 35203, Moved from State

Tuscaloosa County

Folsom, James C., Reston, Va. 22090, Moved from State

Hunter, John W., Jr., Tuscaloosa, Alabama 35401, Transfer to Nonmember

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Social Security Punishes Chronically Ill Who Work

The Social Security disability payment system "financially punishes the man who attempts to work despite his disability," according to Dr. Phillip J. Walker, assistant professor of medicine, Nephrology Division, Vanderbilt University Medical School.

Writing in the May issue of Hospital Physician, Dr. Walker, who is a member of the magazine's consulting editorial board, said that the system, "takes no note of the realities of many chronic diseases, . . . ignores the partially disabled . . . and perpetuates disability long after medical causes have been removed." He suggested concrete recommendations that physicians can make to their Congressmen for revision of laws to provide economic incentives for those who can work part time.

Dr. Walker explained that under current law, the chronically ill person who can work part time—for instance, the kidney patient who must undergo dialysis at home several times a week—may be willing and able to work, but does not do so because he risks "losing disability benefits in exchange for uncertain and often modest income gains." Professional, white collar, and self-employed persons often do return to work, Dr. Walker said, while blue-collar workers, who often have more company benefits to lose, do not.

He also criticized the practice of making patients wait up to six months before payments begin. "By the time a patient is ready to go back to work he has almost fulfilled the six months waiting period for Social Security coverage."

Physicians, he said, are "caught in the middle," because they "don't wish to burden partly disabled patients beyond physical capacity; therefore, they sign disability certification forms even when they feel, privately, that patients could and should resume part or full-time work."

Dr. Walker suggested that total disability costs could be reduced, and patients helped more realistically, if the rules were changed so that partial Social Security or other public support be provided to the patient who can work part time. The combination of disability payments and employment income should net more than either source alone, he said. Supplementing this might be tax breaks to the partially disabled who work, and to the companies willing to employ them.

He urged that patients be given benefits 30 days after their last paycheck, thus preventing a man from having to "bankrupt his family." The patient who returns to work must also be guaranteed that if he becomes disabled again full benefits will be resumed immediately, he said.

Society Of Nuclear Medicine To Meet

The Southeastern Chapter of the Society of Nuclear Medicine will hold its Fourteenth Annual Meeting at the Holiday Inn, Rivermont, Memphis, Tennessee, October 31-November 3, 1973.

The Scientific Program Committee welcomes the submission of original contributions in Nuclear Medicine from members and non-members of the Society for consideration for the scientific session.

Abstracts should contain a statement of purpose, methods used, results and conclusions. It should not exceed 300 words. Title of the paper and name of author(s) as they should appear on the program will be appreciated. Underline the name of the author who will present the paper. Accepted abstracts will be published in the Southern Medical Journal. Abstract and four copies should be mailed to: Edward V. Staab, M. D., Nuclear Medicine Division, Vanderbilt University Hospital, Nashville, Tennessee 37232. Deadline is August 6, 1973.

Dr. Warren G. Sarrell, M. D., Anniston, is current president of the Society.

What's on your patient's face...

may be more important than his chief complaint

The lesions on his face may be solar/actinic—so-called "senile" keratoses...and they may be premalignant.

Solar, actinic or senile keratoses

These lesions may be called by several names, but they usually can be identified by the following characteristics: the typical lesion is flat or slightly elevated, of a brownish or reddish color, papular, dry, rough, adherent, and sharply defined. They commonly occur as multiple lesions, chiefly on the exposed portions of the skin.

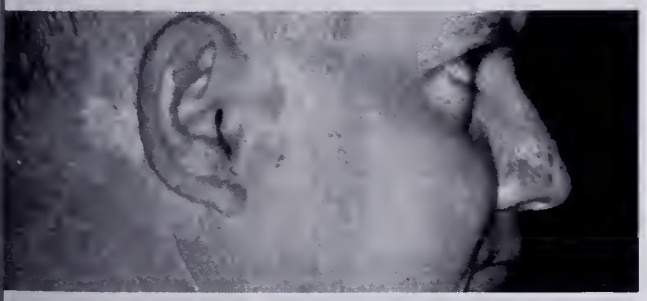
Patient P.T. seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.*

Sequence of therapy/selectivity of response

After several days of therapy with Efudex® (fluorouracil), erythema may begin to appear in the area of the lesions; the reaction usually reaches its height of unsightliness and discomfort within two weeks, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied.

Acceptable results

Treatment with Efudex provides highly favorable cosmetic results. Incidence of scarring is low. This is particularly important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.



Patient P.T. seen on 6/12/67, seven weeks after discontinuation of 5%-FU cream. Reaction has subsided. Residual scarring not seen except for that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.*

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

This patient's lesions were resolved with

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How (Not) To Kill Yourself

(This is the second of a 2-part report on obesity and how to deal with it, from the American Medical Association)

Your body, like a machine, needs a certain amount of "fuel" every day to keep running. Since your body is also constantly maintaining itself, it needs the raw materials and ingredients for this important function, too. If you don't give your body one or more of the fuels and raw materials it needs, then, like a machine, it is liable to run less efficiently—and may break down.

You need five different kinds of nutrients every day: carbohydrates, proteins, vitamins, minerals and fat (yes, fat). Each serves different, and critically important, purposes.

Generally speaking, protein provides building blocks for repair and replacement of the parts of your "machine." Vitamins and minerals help them do their job and assist body maintenance in other ways, and fats and carbohydrates supply the energy. Of course, your body is a versatile machine and can use food in different ways, as necessary. For instance, if you eat few carbohydrates and lots of protein, your body will divert some of the protein for use as an energy source—although this isn't the best way to gain energy, and it is expensive as well.

The Daily Food Guide accompanying this article list the kinds and quantities of foods that best provide all necessary nutrients for normal body maintenance and weight control. Dieters, of course, would eat smaller quantities of the same foods for best nutrition.

If your are dieting, make sure you eat foods containing plenty of proteins, vitamins and minerals, since you will be eating less.

Thinking of dieting strictly in terms of calories can be misleading: Any food, even the "low-calorie" kinds, can be used by your body for energy—or turned into fat. Counting calories won't help you unless you realize that it isn't *what* you eat, but *how much* you eat that really counts.

Calories measure the energy your body can derive from food. When we say a bottle of pop "contains" 140 calories, we mean it has the potential to produce 140 calories of energy for your body's use. How your body *does* use that bottle of pop—whether it "burns" it for energy or stores it up as fat—depends on what else you've eaten, how much, and how active you are.

That's why there is no such thing as "fattening" food. Any more than there is any such thing as "brain" food or food that will stimulate the sex drive. Since your body has certain minimum requirements for all nutrients, the calories in the food it receives will be used to meet those requirements, unless there is an excess. Excess calories, whether in the form of protein, carbohydrate or fat, will just help inflate your "spare tire."

Everyone needs a certain number of calories of energy every day. Men need roughly 2,600 to 2,800 calories a day and women 1,800 to 2,000. Children need a little more than that and old people somewhat less. But that is a general measure of how much energy your body will use, regardless of how much or what you eat.

That's how diets work: Your body needs a certain number of calories daily and if it doesn't get them from food, it turns to an internal source—body fat. Say your body uses 2,500 calories a day. You decide to lose weight and go on a diet that is nutritionally well-balanced but contains only 2,000 calories a day. To get that extra 500 calories, your body will burn up small amounts of stored fat. In a week, you will have lost a pound. Ten weeks, 10 pounds.

If you have searched for a reliable way to lose weight and try every new diet that comes along, relax. Your search is over.

Here is the "magic formula," in five little words:

Eat less and exercise more.

And even that method won't work unless you follow it scrupulously and use a little common sense.

A truckload of pills, candy, potions or calorie-counting charts won't help you unless you follow that formula. Unfortunately, Americans who spend $100 million each year on diet fads and gimmicks never seem to recognize that simple fact.

To diet successfully, first check your eating habits against the Food Guide accompanying this article, to make sure you are getting proper nutrition. Then, simply reduce the portions you take of foods you normally eat, assuming they are nutritionally correct. Experiment with portions a bit—try taking half as much as you usually do, and if you don't start to lose weight in a week or so, cut down the portions more until you are losing weight gradually.

It's not wise to go on a starvation or semi-starvation diet unless your doctor recommends it. Diets of 600 calories or less a day make it almost impossible to get all the proper nutrients, and can leave you exhausted, irritable and more susceptible to illness.

And when you diet, don't be impatient. If you try to lose 10 pounds a week, you are likely to gain weight again once you have quit dieting. But if you try to lose only one or two pounds a week, you will not only have a more easily attainable goal, you will have a longer period in which to get accustomed to new eating habits. And readjusted eating habits are a key factor in long term weight control.

Finally, don't underestimate the impor-

(Continued on Page 54)

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tance of regular exercise. Even a moderate amount of daily exercise—walking, jogging, calisthenics or bike riding—can help your waistline as much as a strict diet. By combining diet and exercise, you stay slim and improve your fitness. But remember that *regular* exercise is important; don't jump out of an easy chair and run a mile. Start with modest exercise and stop when you reach the point of breathlessness. Gradually, you will be able to do more each day before you begin to feel tired.

Just a brisk, 30-minute walk after dinner every evening will burn up 150 calories more than you normally would expend. That's 150 calories your body could be "banking." In this case, spending, not saving, is the best way to fight inflation.

DAILY FOOD GUIDE*

	Child	Preteen & Teen	Adult	Aging Adult
milk or milk products (in cups)	2-3	3-4 or more	2 or more	2 or more
meat, fish, poultry, eggs (in servings)	1-2	3 or more	2 or more	2 or more
green & yellow vegetables (servings)	1-2	2	2	1
citrus fruits & tomatoes (servings)	1	1-2	1	1-2
potatoes, other fruits & vegetables (servings)	1	1	1	0-1
bread, flour & cereal (servings)	3-4	4 or more	3-4	2-3
butter or margarine (tablespoons)	2	2-4	2-3	1-2

Highly recommended: 3 to 5 cups of fluids per day

*This is *not* a weight-reduction diet. It is a suggested menu for normal weight control and good nutrition.

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands, no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, "Rondomycin" (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of "Rondomycin" (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: "Rondomycin" (methacycline HCl): 150 mg and 300 mg capsules, syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

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*Since many strains are known to be resistant, routine sensitivity testing is recommended.

When irritable colon feels like this

Antiserum Used At Emory To Screen For Leukemia

A substance developed at Emory University is being used to screen apparently healthy individuals for early signs of leukemia and similar forms of cancer.

Dr. Daniel Rudman, professor of medicine and director of the Emory University Clinical Research Facility, identified the substance as an extremely sensitive antiserum made by injecting a unique protein found in leukemia patients into live rabbits.

He emphasized that the screening tests are still experimental but eventually it is hoped that large population groups can be tested with specific antisera for various forms of cancer.

The active molecule in the antiserum is an antibody specifically tailored in the rabbit's body to enable the animal to reject the abnormal or foreign protein which is produced during metabolism of human cancer cells. The antiserum's antibody forms a visible reaction with even a minute quantity of the cancer-related protein.

About 80 per cent of leukemic patients show a positive reaction with the antiserum, Dr. Rudman said. In addition, about 60 seemingly normal individuals, with no symptoms of cancer, have been tested with leukemia antiserum in the NIH-supported Emory University Clinical Research Facility at Emory University Hospital. Of these, three have shown positive reactions.

Dr. Rudman said that even though the three test subjects with positive reactions are symptom-free, they will be examined regularly for a number of years to see if leukemia or any other cancer develops. "We'd like to know if we've found some form of cancer in a very early pre-symptom stage in these people," he explained.

The research project is based on the discovery at Emory and at other medical centers that many cancers produce abnormal proteins specific to that particular type of cancer. The cancer cells release the proteins into the body fluids such as blood and urine. The cancer-related proteins also appear in fluid collections which may form in the cavities of the abdomen or chest.

The Emory group is working with three such proteins which appear specific for the following types of cancers: leukemia and leukemia-related diseases, including Hodgkin's disease and the lymphomas; cancer of the gastrointestinal tract; and cancer of the breast.

So far, the most sensitive type of antiserum has been produced with the leukemia-related protein.

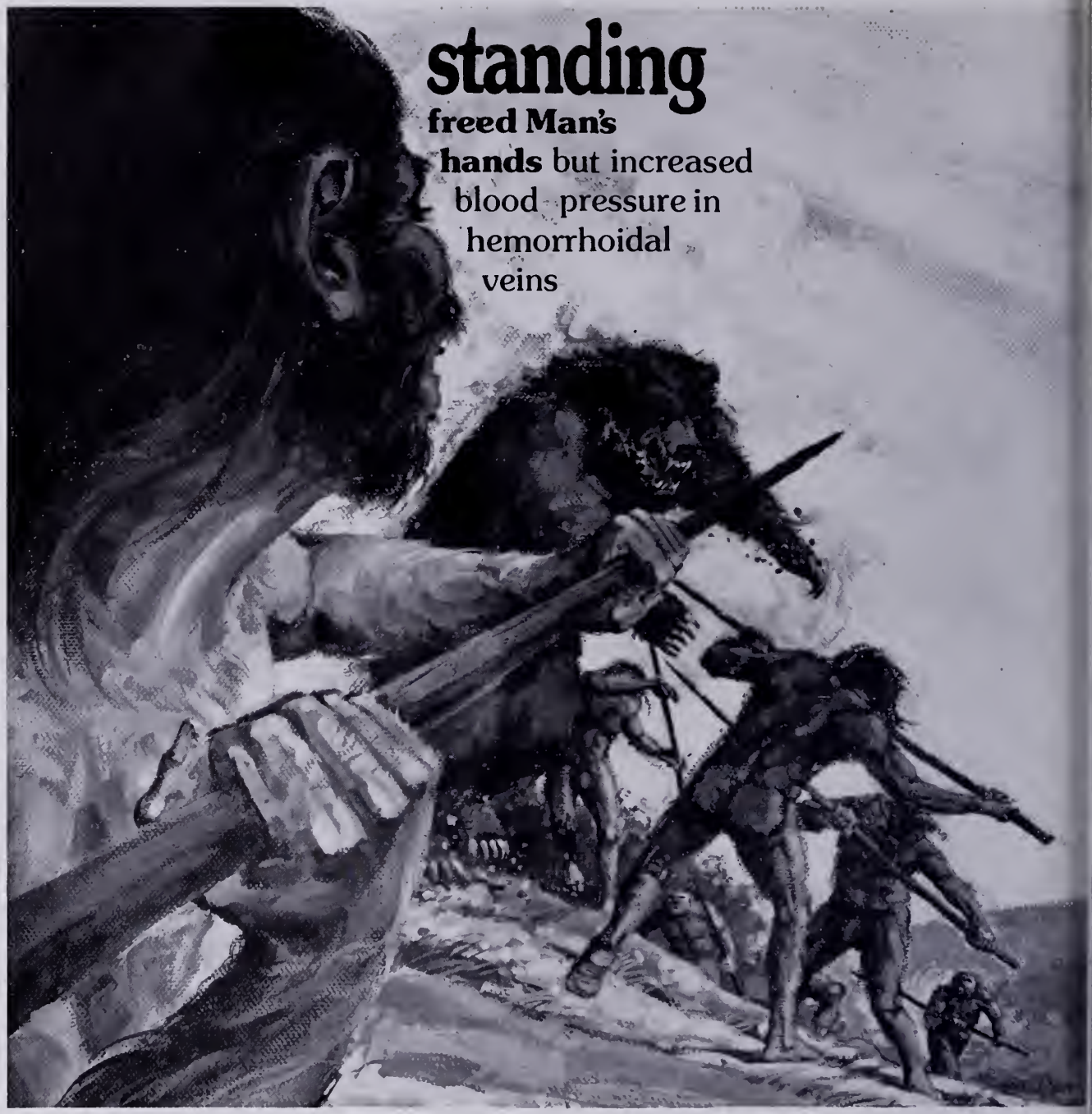
"There is evidence that as many as 15 different cancer-related proteins may exist," Dr. Rudman said. "We've isolated three of these and developed a potent antiserum to one. But once each protein is isolated, it's only a matter of time before an antiserum is made."

The work is similar to efforts in a number of medical centers to develop mass-screening based on a protein called carcinoembryonic antigen (CEM), which seem specific for cancer of the lower bowel, Dr. Rudman said. CEM is taken from the tumor itself, while Dr. Rudman and his colleagues are working with proteins isolated from body fluids.

In 1968, according to Dr. Rudman, researchers at other hospitals also produced a sensitive antiserum test to detect cancer of the liver.

It is believed the cancer-related protein molecules being studied at Emory are "throwbacks" to a type of material produced at an earlier stage of development before the cell differentiated into a mature adult cell type.

In other cases, the abnormal protein may be shed from the abnormal surface of the cancer cell, Dr. Rudman said.



Precaution
Prolonged or excessive use of Anusol·HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration
Anusol·HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides.
Regular Anusol: one suppository in the morning, one at bedtime, and one immediately following each evacuation.

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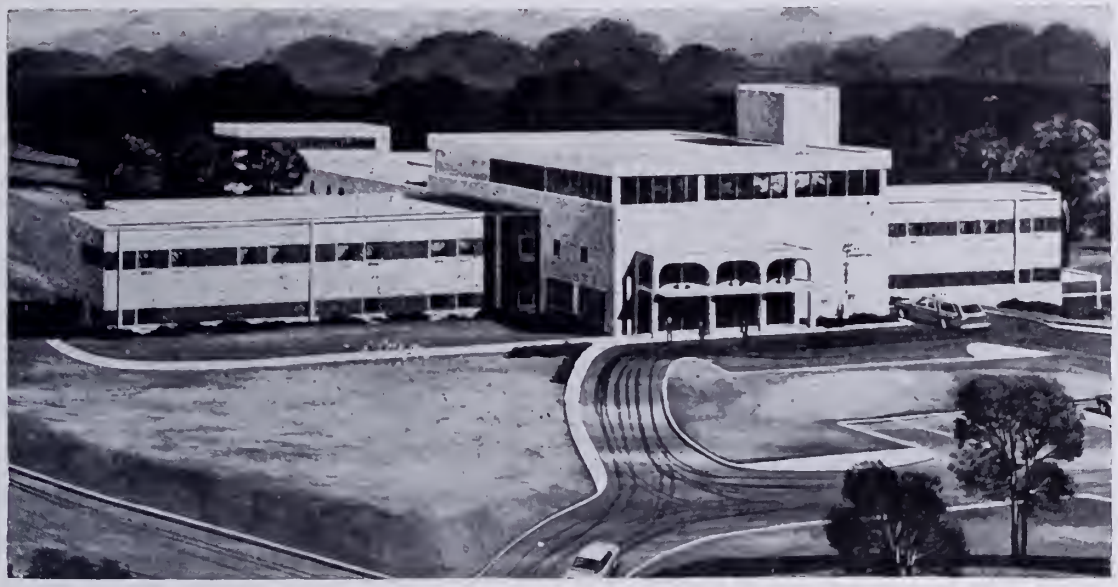

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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THE JOURNAL

of the

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2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia.* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.
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Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American Pharmaceutical Association

"Too many doctors are indiffe ent to the economic consequences their decisions." So stated a recen issue of *Medical News Report* (December 4, 1972), an independent weekly newsletter published by for AMA Chief Executive F. J. L. Blasin game, M.D.

Doctor, are you indifferent...?

In discussing an anticipated i crease in Blue Shield rates, Dr. Bla ingame's newsletter had this to sa

"In general, it can be said, M have given the impression they are not particularly concerned with th increase in cost of health care to t patients...

"True, an MD's training is pri marily scientific, but in the real wo of practice, all of his scientific dec sions have a price tag, or an econo impact. The economics of health c beckon the practitioner's attentior Concern for economics of medicir

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical Manufacturers Association

When the pharmacist recom mends that a drug product other t the one ordered be dispensed, the prescriber invariably permits the change when he feels the best inte ests of the patient will be served.

Shortcomings of Pro-Substitution Argument

The fact remains that it is ne sary for the prescriber to know tha the change is being contemplated and to be in a position to consent demur. Without that opportunity, unilateral decision of the pharmac made in the absence of clinical kn edge of the patient, could expose to needless risks, and in addition, jeopardize the relationship betwe the professions of Pharmacy and Medicine. In my view, there is not in the pro-substitution argument t offsets these risks.

The Issue of Drug Knowledge

Substitution advocates clair that the primary justification for changing the rules is the desire to better utilize pharmacists' knowle about drugs. Yet the pharmacist's task to keep current on the entire field of drug therapy, to some deg puts him at a disadvantage. Most often, a practicing physician will r expert knowledge of no more than 5

Advertisement

uld be an obligation of medical ctice...

"Medical societies ought to con- t continuing campaigns to point the substantial savings that could ealized thru deductible insurance protection for catastrophic ill- s. At the very least, they should, in patients' interest, question the ics of any insurance organization raises health care costs by forc- policyholders to buy insurance may not need or want and prob- won't ever use.

"Too many doctors are indiffer- to the economic consequences of r decisions. Too many, for ex- le, habitually hospitalize patients he convenience of the MD. It's sense to deny such habits exist...

"Doctors, thru their medical so- ies, have unhesitatingly appealed eir patients for support in the t against government interference the private practice of medicine. the public in the past has re- nded. It's time the American Med- Association and state and local dical societies paid off the debt by isive action to hold down the cost edical care."

t of Drugs

Insurance rates and hospital rges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

---

30 drugs that he selects to treat the jority of conditions encountered in practice. Moreover, the physi- n's choice of a specific brand is ed on his knowledge of the pa- nt's medical history and current dition, and his experiences with particular manufacturer's duct.

Some substitution proponents e argued that the dispensing of a scription is a simple two-party nsaction between the pharmacist d the patient, and that a substitut- pharmacist may avoid even a hnical breach of contract by simply ifying the patient that he is making substitution. I would judge that courts would be sympathetic ard a pharmacist who substituted hout physician approval and who dertook a legal defense that seeks make the patient responsible for pharmacist's actions.

luced Prescription Prices?

Substitution advocates are ggesting to the consumer, and par- ularly the consumer activist, that luced prescription prices could ow legalization of substitution. have seen absolutely no evidence ustify this claim. To the contrary, perience in Alberta, Canada, where bstitution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

President's Page

DR. CAMP

Comments On AMA Meeting

This country boy never ceases to be amazed at the skyline of New York City. My neck is still a little bit stiff from staring at the tall buildings and trying to get my field of vision to reach the top.

Of the many hundreds of items of business which came before the various committees by far the most controversial was the PSRO law. There is a minority group which feels that this law should be repealed, namely Louisiana, Nebraska and Oklahoma. There may be one or two others. However, the majority of physicians feel that PSRO is here. It is now the law of the land. We physicians must try to make it work. Dr. Charles C. Edwards was kind enough to come and address the House of Delegates and I quote herein from his speech as recorded by an article in the *New York Times*. He stated:

"The public will insist that some way be found to make sure that no one is priced out of the health marketplace, that no one gets care that is below a reasonable standard of quality, and that no one is forced to do without appropriate care simply because it is not available in his or her area of the country." He further stated:

"If the nation's doctors do not assist in insuring that quality care is good and that funds are spent properly, the alternative would be for review to be made by some bureaucratic agency in Washington."

Dr. Edwards is one of the Federal Government's highest ranking health officers. He is Assistant Secretary for Health, Department of Health, Education and Welfare. Dr. Edwards also was formerly employed by the AMA. So, I think we have to take the implication that Dr. Edwards rather bluntly gave us as the true feeling of HEW.

The point of view that we must at least give PSRO a reasonable and honest opportunity to work in our state has long been your President's view. I feel like the states who refuse to cooperate in no manner whatsoever will certainly be inviting the HEW people to completely bypass the doctors on the PSRO or reviews committee.

While we still do not have to have the precise guidelines, it would seem to your President at this time that by no stretch of the imagination will the Medical Association of any state be allowed to be the PSRO review committee. I think it is quite clear that the HEW wants a definite separation from organized medicine of this top committee. If I get the message clear, and I believe I do, the HEW wants the best possible quality of care for the least amount of money.

E. E. Camp, M. D.
President

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Final classification of the less-than-effective indications requires further investigation.

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Safety On The Streets

The recent rise in the bicycle population has led to a corresponding upsurge in bicycle accidents and injuries-primarily among school-age children. Last year 6.5 million bicycles were sold, 42 for every 1,000 people. What can you do to teach these children about bicycle safety? Encourage your elementary teachers in the schools to have an "All About Bikes" program in your local school to teach the children that the bicycle is a vehicle not just a toy.

School vandalism is another problem. The parents of a P. T. A. in one school solved this problem by having a security guard at night and better lighting around their school.

In Alabama the 15 to 24 age group, who potentially should be ready to make the greatest contribution to society, is showing the greatest increase in traffic fatalities. Nearly one-third of all motor vehicle accident victims in 1972 were between 15 and 24 years of age while this age group comprises only about one-fourth of the driving population. How many of your children have had a Defensive Driving Course? This has proved to be an effective remedy to dangerous driving. Huntsville, Birmingham and Mobile already have excellent (DDC) programs.

Street Safety Mini talks may be ordered by women's clubs from the Women's Conference, National Safety Council, 425 North Michigan Ave., Chicago, Ill. 60611; as well as slides and accompanying scriptbook describing the Women's Crusade to bring back Safety on the Streets.

Miss Lois Winterbery, Manager, Women's Department of National Safety Council said that the Board of Directors of the National Safety Council voted in April in New York to have a week in October during the time of the National Safety Congress to observe National Safety Week. Every state is encouraged to participate in this program. In 1970 there were 55,000 traffic fatalities in this country. This amounts to about 300 fatalities every two days. Go to your local safety department and ask what you can do to help.

MRS. GRADY

In Governor Wallace's Traffic Newsletter of April, 1973, it states that alcohol is involved in more than 64 per cent of Alabama's fatal automobile collisions. This is well above the national average. Drugs are also

responsible for a large number of traffic accidents.

Many cities have programs and materials available on self-defense for women. An excellent film that features Policewoman Jeanne Bray from Columbus, Ohio, in precautions women can take to avoid assault at home, in the car and on the streets, is "It Could Happen to You." This film can be obtained from the Chamber of Congress of U. S., 1615 H. Street, N. W. Washington, D. C. 20006. Have one program during your auxiliary year on self-defence against violence on the streets for adults and children to show that "We Care."

Betty Grady

Betty Grady, President

AMA Accredits Joint Education Program

The first joint University-Veterans Administration Hospital continuing medical education programs have received approval from the American Medical Association (AMA), making Alabama the first state in the nation to be covered by such an arrangement.

Accreditation for the programs was granted because of the VA's unique affiliation with the University of Alabama-Birmingham (UAB). UAB has assumed responsibility for the quality and content of lectures, seminars, and continuing medical education programs offered by VA facilities in Birmingham, Montgomery, Tuscaloosa, and Tuskegee.

Dr. Laurence V. Foye, Jr., director of Education Service Research and Education in

(Continued on Page 84)

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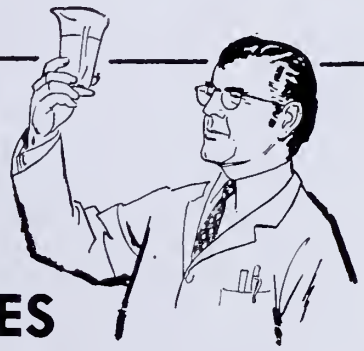

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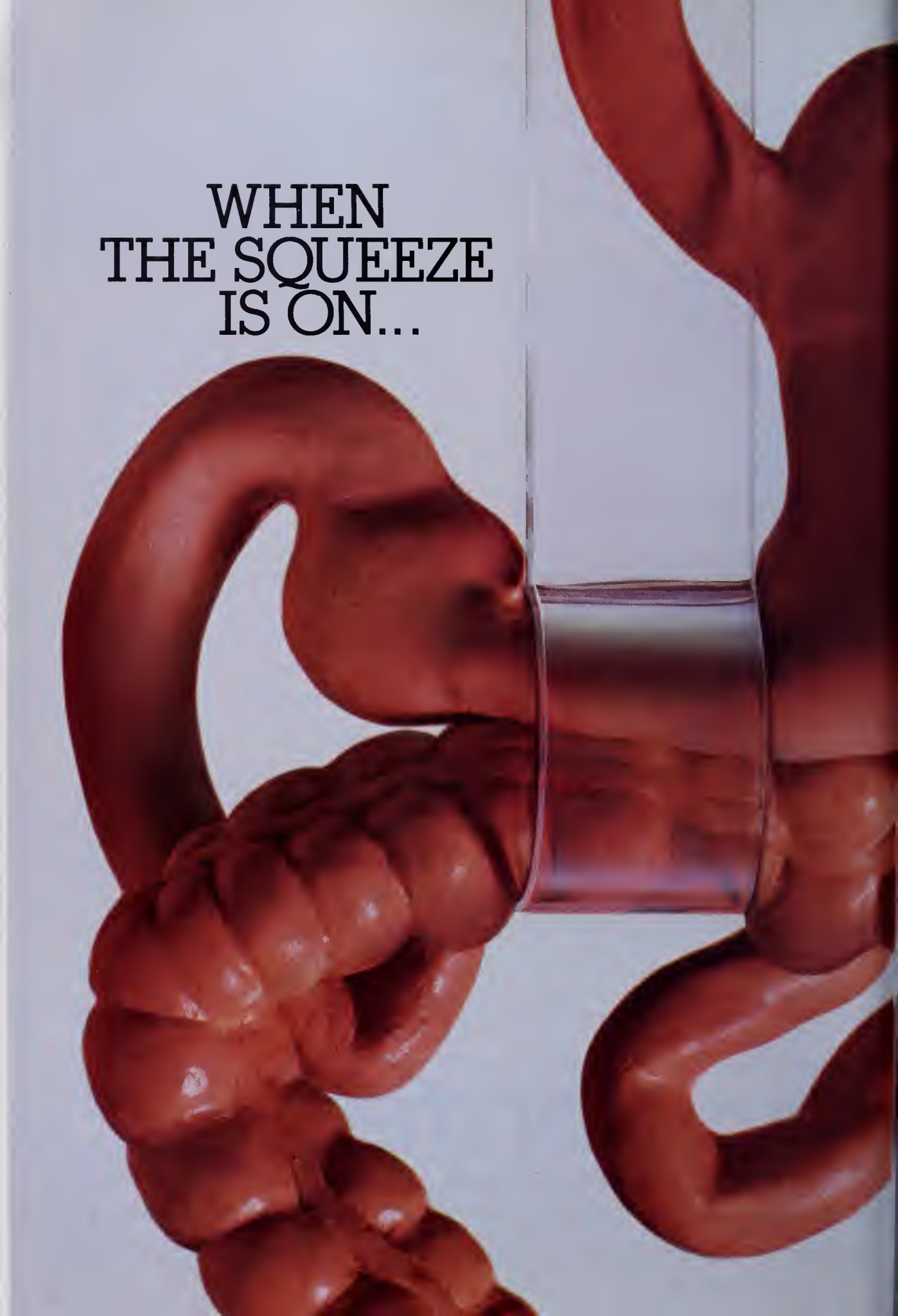
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AMA Legislative Department-- A Vital Service

The American Medical Association's Legislative Department provides a vital service to member physicians all across the country. At the same time, it is regarded by many as one of the most substantial of the intangible benefits which the AMA offers to its membership.

The Legislative Department staffs the AMA Council on Legislation and specializes in all phases of national legislation. After studying, analyzing, and interpreting all Congressional legislation pertaining to medical and health care, the department makes available this information to state, county, and specialty medical societies, members of the public, and other organizations. This usually totals about 2,300 bills of medical interest per Congress. An increased responsibility of this department is the critical review of government regulations which often seriously affect application of law. There are few physicians who could devote the time necessary to accomplish this on their own and, yet, this information is vital because it affects the way medicine is practiced in this country.

To keep key medical leadership aware of legislative developments when Congress is in session, the department writes, publishes, and distributes LEGISLATIVE ROUND-UP, weekly, to approximately 5,000 key state, county, and specialty medical society officers.

Another vital activity is the assistance given to AMA Officers in the preparation of testimony and presentations for Congressional hearings. The Legislative Department works with the appropriate AMA scientific personnel to gain the benefit of their expertise before assembling any presentation. The Council on Legislation can then use this resource material to formulate a sound recommendation as to the best policy position for the AMA. Many people do not realize the AMA is often requested to testify because its views are valued not only by Congress but by the various governmental agencies.

The department also assists in the development, writing, and presentation of draft legislation for consideration by members of Congress, such as the AMA's own national health insurance bill, MEDICREDIT. They also assist in the development of presentations to the regulatory agencies.

The staff participates in providing legislative orientation to the AMA's Councils and Committees as well as to members of the profession who are in Washington, D. C. to visit members of Congress.

Finally, the department has undertaken the monitoring of state legislation with a view towards eventually assisting the profession to attain its legislative goals on a state as well as on a national level.

From Medicaid and Medicare regulations to chiropractic issues, national health insurance and appropriations for HEW programs, federal and state medical and health care legislation affects all physicians in some way. The AMA's Legislative Department maintains constant surveillance and provides AMA physician policy makers with accurate and up-to-date information. The leadership of organized medicine can make their judgments and represent AMA's membership with a sound base of resources.

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"T.I.A.'s (Transient Ischemic Attacks) . . . An Early Warning System of Impending Stroke is the title of a 31-minute, 16mm film recently developed by Marion Laboratories, Inc.

The film deals with early recognition and diagnosis of the stroke-prone individual. John Stirling Meyer, M. D. and Michael DeBakey, M. D., world renowned authorities on cerebral vascular disease, have cooperated in the production of this informative program.

The purpose of the film is to help the medical community readily recognize the danger signals and, by taking advantage of such warnings, reduce the occurence of stroke —the third most prevalent public health cause of death in the United States.

To schedule it for staff meetings, phone or write Mr. James A. Byrnes, 816-761-2500, Marion Laboratories Pharmaceutical Division, 10236 Bunker Ridge Road, Kansas City, Missouri 64137.

A 27-minute, 16 mm color film entitled, *"Bicornuate Uterus, Diagnosis and Management,"* is now available for showing to medical groups from E. R. Squibb & Sons, Inc.

In the film, Dr. Y. Douglas Taguchi discusses bicornuate uterus, the commonest uterine anomaly; three techniques of metroplasty, a corrective surgical procedure; and presents a demonstration of one of the techniques. Various types of bicornuate uteri are illustrated with detailed drawings.

The film stresses difficulties that are associated with bicornuate uterus such as habitual abortion particularly in mid-trimester, complicated labor, moderate or severe dysmenorrhea, and possible infertility. Dr. Taguchi also presents a demonstration of the Tompkins' technique of metroplasty.

This film may be obtained for professional groups by writing to E. R. Squibb & Sons, Inc., P. O. Box 4000, Princeton, New Jersey 08540.

"Principles of Beta-Adrenergic Blockade" is a film designed to help the practicing physician diagnose and treat catecholamine-induced cardiac arrhythmias. Presented are actual cases of various types of arrhythmias . . . and the viewer is invited to participate in determining the diagnosis and selection of therapy.

Participating in the film are Drs. Edmund H. Sonnenblick, Director of Cardiovascular Research, and Michael V. Herman, Director, Cardiac Catheterization Laboratories of Peter Bent Brigham Hospital and Harvard Medical School.

If you would like to obtain this film for showing to medical groups, contact John B. Jewell, M. D., Executive Vice-President and Medical Director, Ayerst Laboratories, Medical Department, 685 Third Avenue, New York, New York 10017.

Countdown on National Health Insurance is an audio-tape synthesis of national health insurance presentations from the American Society of Internal Medicine's sixteenth annual meeting.

It is a 45-minute documentary including a congressional perspective by House Ways and Means Committee Chairman Wilbur D. Mills. The listener will also hear four major proposals for national health insurance presented by AFL-CIO President Leonard Woodcock, AMA President-Elect Russell Roth, HEW Assistant Secretary Stephen Kurzman, and health insurance industry spokesman Daniel Pettengill.

If you or your society or group is interested in the national health insurance issue, contact the ASIM, 525 The Hearst Building, Third at Market, San Francisco, California 94103.

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An Ideal Autopsy Permit

George F. Scofield, M. D.*

Ann Sorge, B. S. R. N.**

Birmingham, Alabama

Legitimate questions have been raised as to the value of the autopsy in modern medicine. Despite these questions many continue to feel that a hospital's autopsy percentage still is the best single indicator of the quality of medicine practiced in the institution. One reason that frequently prohibits the performance of an autopsy, is confusion as to whom can legally give permission for the autopsy to be done.

An autopsy permission form has been developed at Carraway Methodist Medical Center which has almost completely eliminated the usual problems. The form was instituted after an exhaustive research of the Alabama Law by one of us (A. S.).

The form is printed on standard 8½" x 11" paper which is the size of the hospital chart. The front side (Figure 1) provides self explanatory blanks to be completed. The back side (Figure 2) gives detailed instructions as to whom has legal authority to give permission for an autopsy to be done.

The authorization form is completed in duplicate. One copy becomes a permanent part of the patient's chart, the other is filed in the Pathology Department.

During the two years that this authorization form has been used, problems concerning autopsy permissions have been virtually eliminated. The form is felt to offer maximum legal protection to the attending physician, the hospital and the Pathologist.

*Pathologist, Carraway Methodist Medical Center.

**Assistant Administrator, Carraway Methodist Medical Center.

INSTRUCTIONS

When securing signed authorization for the autopsy, observe the following order of preference in securing signature from the person(s) who may legally give consent:

1) Surviving spouse, if living together at time of demise; if spouse is deceased or incompetent then,
2) Adult children (over 21); all children if possible. If none then,
3) Adult grandchildren (over 21); if none then,
4) Parents, if none then,
5) Brothers or sisters, if none then,
6) Nephews or nieces, if none then,
7) Grandparents, if none then,
8) Uncles or aunts, if none then,
9) Cousins, if none then,
10) Stepchildren, if none then,
11) Relatives of next of kin of previously deceased spouse, if none then,
12) Any other relative or friend who assumes custody of the body for burial.

ADDITIONAL INSTRUCTIONS

1) All consenters above must be over 21 years old.
2) Write on form under "Limitations of Authority" any restrictions which are requested by the person or persons signing Consent for Post-mortem Examination.

AN IDEAL AUTOPSY PERMIT

CMH-67
Revised 1969
Modified 1972

CARRAWAY METHODIST HOSPITAL

AUTHORIZATION FOR POST-MORTEM EXAMINATION

Date _____

I HEREBY REQUEST AND AUTHORIZE the pathologist or his representative to perform a complete post-mortem examination on _____, Age_____
(Name of deceased)

and dispose of removed tissue as he shall see fit.

I request that (his)(her) eyes be contributed to Alabama Lions Eye Bank Yes___No___

LIMITATIONS OF AUTHORIZATION

This Authorization shall be limited only by the conditions expressly stated below:

_____

Signature_____ Signature_____
(Witness) (Person authorized to give consent)

Signature_____ _____
(Witness) (Relation of above to deceased)

_____
Residence Telephone No.

Complete this part when Telephone Permission is obtained.

Telephone number called_____ Time call was completed_____

Name of a witness at the number called
who can identify person giving permission:_____

Name of witness on the hospital phone
who monitors the call: _____

The funeral director named below is authorized to call for the body after the examination has been completed.

_____
(Name) (Address)

Please complete this form in duplicate, attach original copy to the chart, and send copy to the Pathology Department Office.

(Instructions on reverse side of this form)

Figure 1

3) In case of doubt, the consent of all of the next of kin must be obtained.

4) When there is a living spouse who is not living with deceased at the time of demise, the next of kin assuming responsibility for the burial is the one, or are the ones, authorized to give consent.

INSTRUCTIONS

When securing signed authorization for the autopsy, observe the following order of preference in securing signature from the person(s) who may legally give consent:

1) Surviving spouse, if living together at time of demise; if spouse is deceased or imcompetent then,

2) Adult children (over 21); all children if possible. If none then,

3) Adult grandchildren (over 21); if none then,

4) Parents, if none then,

5) Brothers or sisters, if none then,

6) Nephews or nieces, if none then,

7) Grandparents, if none then,

8) Uncles or aunts, if none then,

9) Cousins, if none then,

10) Stepchildren, if none then,

11) Relatives of next of kin of previously deceased spouse, if none then,

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3) In case of doubt, the consent of all of the next of kin must be obtained.

4) When there is a living spouse who is not living with deceased at the time of demise, the next of kin assuming responsibility for the burial is the one, or are the ones, authorized to give consent.

TIPS FOR THE IDENTIFICATION OF DRUG ABUSERS

The chart below was adapted by the Medical Association of the State of Alabama from one prepared by the Suffolk County (New York) Medical Society.

Drugs Used	Physical Symptoms	Look For	Dangers
Glue Sniffing	Violence, Drunk Appearance, Dreamy or blank expression	Tubes of glue, Glue smears, Large Paper Bags, or Handkerchiefs	Lung/Brain/Liver Damage, Death through suffocation or choking, Anemia
Heroin, Morphine, Codeine	Stupor, Drowsiness, Needle marks on body, Watery eyes, Loss of appetite, Blood stain on shirt sleeve, Running nose	Needle or hypodermic syringe, Cotton, Tourniquet-string, Rope, Belt, Burnt bottle Caps or Spoons, Glassine envelopes	Death from overdose, Addiction, Liver and other infections due to unsterile needles
Cough Medicine containing Codeine and Opium	Drunk appearance, Lack of coordination, Confusion, Excessive Itching	Empty bottle of cough medicine	Addiction
Marijuana ("Pot," "Grass")	Sleepiness, Wandering mind, Enlarged pupils, Lack of co-ordination, Craving for sweets, Increased appetite	Strong odor of burnt leaves, Small seeds in pocket lining, Cigarette paper, Discolored fingers	Inducement to take stronger narcotics. Psychological dependence. Possible physical damage?
Hallucinogens: (LSD, DMT)	Severe Hallucinations, Feelings of detachment, Incoherent speech, Cold hands & feet, Vomiting, Laughing & crying	Cube sugar with discoloration in center, Strong body odor, Small tube of liquid	Suicidal tendencies, Unpredictable behavior, Chronic exposure causes brain damage
Stimulants: Amphetamines ("Pep Pills," "Ups")	Aggressive behavior, Giggling, Silliness, Rapid Speech, Confused thinking, No appetite, Extreme fatigue, Dry Mouth, Shakiness, Insomnia	Pills or capsules of varying colors, Chain smoking	Death from overdose, Hallucinations, Psychosis
Sedatives Barbiturates ("Goof Balls," "Downs")	Drowsiness, Stupor, Dullness, Slurred speech, Drunk appearance, Vomiting	Pills or capsules of varying colors	Death or unconsciousness from overdose, Addiction, Convulsions in withdrawal

It is not what men eat, but what they digest, that makes them strong; not what we gain, but what we save, that makes us rich; not what we read, but what we absorb, that makes us learned; not what we preach, but what we practice, that makes us lovable.

—*Francis Bacon*

To obey the law is to support democracy. If every man thinks every law must suit him in order that he shall obey it, he does not support democracy but destroys it. The basis of good government lies in the fact that the people are willing to obey the law as they have determined it to be.

—*William Howard Taft*

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Dr. Robinson Nominated, Elected AMA Vice President

The following are remarks by Dr. Paul W. Burleson, Birmingham, made before the House of Delegates of the American Medical Association on June 27. Following this nominating speech, Dr. E. Bryce Robinson was elected Vice President by acclamation.

Mr. Chairman, Fellow Members of the House of Delegates:

It is indeed my pleasure to place in nomination the name of E. Bryce Robinson for the office of vice president of the American Medical Association.

Dr. Robinson is well known to all of us, having served in this House as a delegate from Alabama for 20 years. He has served faithfully in many capacities and at the present time is completing his tenure of ten years on the council on medical education. He is the Vice Chairman of the Council.

Dr. Robinson has had a distinguished career in medicine. He is a specialist in the field of anesthesiology and is certified by the American Board of Anesthesiology and is a Fellow in the American College of Anesthesiology.

Dr. Robinson became Medical Director of the Lloyd Noland Hospital in 1951 and President of the Lloyd Noland Foundation that same year. This hospital is located in Fairfield, Alabama and is one of the finest medical institutions in our area and in the nation. A wing of the hospital has recently been named in Bryce's honor and is a tribute to his great leadership and competence in the field of medical administration.

Dr. Robinson also has rendered distinguished service to his profession in Alabama having served as President of his county medical society and member of the Board of Censors and as President of the state medical association.

Dr. Robinson served his country during World War II as a member of the United States Army Medical Corps from 1941-45. During this period he was stationed for two and one half years in the North African and Mediterranean Theaters and was discharged from active duty with the rank of lieutenant colonel.

Dr. Robinson has a very human side that some of you may not know about. His father was a Presbyterian minister who served as the Director of the Talladega Children's Home. As we know, ministers were not given much financial assistance in those days to help in raising their families. Through his his own talents and resourcefulness Bryce worked to defray expenses in high school and college as a drummer in small dance bands. He has risen from humble beginnings to high office in his various endeavors and it is this pattern of success which I feel should be continued.

As Vice President of the American Medical Association he will bring a broad perspective of experience to the top echelon on organized medicine. His maturity will give proper dignity to the high office of Vice President of the American Medical Association.

With this great background of dedication and accomplishment, in the field of medicine, I can assure the members of this House that Bryce Robinson will continue to contribute to the upgrading of our profession and will continue to serve us faithfully, as he has in the past.

(Continued from Page 69)

Medicine with the VA's Department of Medicine and Surgery in Washington, praised the alliance and its benefits.

"Every physician in Alabama," said Dr. Foye, "can now meet the requirements for the AMA's Physician's Recognition Award by attendance at programs provided by any of these four VA hospitals or by the University. Of even greater importance is the fact that attendance at these AMA-accredited programs will satisfy the types of requirements being developed nationwide for the State relicensure of physicians."

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Acupuncture in the Pain Syndrome

Henri Rathle, M. D., F. A. C. I. A.

Mobile, Alabama

Our usage of standard hypodermic needles in acupuncture was forced upon us when we lost our gold and silver needles made especially for us by a jeweler in Paris in 1937.

A few months after we arrived in Cairo, we discovered that those needles, as recommended by western acupuncturists physicians practicing in Paris, were gone.

There was a fine Armenian jeweler in Cairo, a man of a subclass of Benvenuto Cellini, who fashioned for us a few needles as described by Soulie de Morant[1], but when we joined the Royal Army Medical Corps (RAMC) of the British Army in 1941, they were stored and not found again when we left the army.

So why not try our own chrome and nickel hypo needles of these days? It worked.

The first case was a woman in her seventies, almost blind with a tumor of the pituitary, whose son we knew. He asked us if she could be helped. Beside pain and rigidity in her left knee for years, she could not bend it for sometime. She was brought one night in our office with great difficulty and we planted 1½″ needles in each of the following sites:

(a) in the depression in front of the head of the fibula,

(b) the subject standing, on the posterior edge of the head of great trochanter,

(c) in the middle of the popliteal fold,

(d) on the same line at 1½″ fingerbreadth (Chinese expression) laterally, and

(e) on the medial extremity of the fold of the knee.

All these points are Chinese points[2], corresponding to various meridians, except the last one, we believe, which we found to be tender.

The patient after 15 minutes and the needles removed was asked to walk. We can still see her standing against the glass door crying in French "But, I can bend the knee. I can bend the knee." This was our first case. We were, if not more astonished than the patient, at least as pleased as she was. We repeated the applications a few more times over the next few weeks and that was all. Her son reported she had no more trouble. Her disability was of years. We repeat, the points chosen were those described in Chinese Acupuncture. They were chosen regardless of what we know now about trigger points, yet pressure with the finger on these points elicited what the French call "douleur exquise" or "exquisite pain." Just observe the eyes of the patients when you press the right place; they wince.

There have been innumerable cases we treated, some unrelated with the pain syndrome, but most of the cases we treated,

along with the substance of this paper, will deal with the pain element, the most enigmatic, baffling and frustrating problem in medical practice. In most of the cases—and this is an understatement—the pain was greatly relieved even before the patient left the office.

The seances may have to be resumed again within days or weeks. The criterion for the resumption of treatment is the resumption of pain, not before. And this writer cannot hide his delight for a simple method, yet, most effective in any office or hospital practice.

Here is another case. A patient in her early twenties came to consult us for a left facial (trigeminal) neuralgia. She was submitted elsewhere several months earlier to an alcohol infiltration of the trigeminal nerve. Three sensitive points were found:

(1) at a 1½″ fingerbreadth laterally to the nostril,

(2) one at the midial extremity of the orbital edge, and

(3) one at one fingerbreadth laterally to the commissure of the lip. There, we inserted three one-inch 23 G needles not quite to the bone, actually stopping at any resistance point. After ten minutes, we were told that the pain was almost gone. All it took was two seances after which the patient was free of pain. There was no therapeutic infiltration of any kind and no other treatments that could have started or maintained an improvement.

There was another case of facial pain (trigeminal), idiopathic, in a patient in her late twenties, who had received steroid treatment with only an insignificant relief. We convinced her to accept the treatment. The points were similar to the first case. She acknowledged relief 15 minutes after the insertion of the needles.

The relief would last one or two months. Several seances were applied. However, the patient who had to travel 200 miles decided to undergo an alcohol infiltration near her hometown.

Method

Physicians can practice this form of acupuncture with their own tools. We are sure practitioners are familiar with local infiltrations with procaine. Infiltrations are not always feasible, either by lack of facilities or risky areas, near nerves and this is beside the merit of either form of treatment.

The acupuncture described here would be a facet of a large Chinese system where meridians are theoretically established over the body. The present method was developed out of necessity and or frustration.

In the Chinese manner, in a given malady, several points of the one meridian are either sensitive or described in the treatment. Our presentation of this method of acupuncture relies mostly on regional or local treatments. More sophisticated points are described or learned in treatises of acupuncture, but it can be a full time job.

For instance, in head cold, Voisin[3] describes five points; in cardiac dyspnea six points; in pulmonary dyspnea seven points. There is no doubt that acupuncture at a distance is an important phase, even now, of the practitioners of the Art, even though modern therapies have supplanted many of its needs (we believe). We do not think that it be absolutely necessary to practice moxibustion (a manner of mild cauterization) to treat anemia, although experiments performed in

Europe with moxibustion gave, in the first few hours, a rise of four, to 500,000 RBC; the next day there was a similar augmentation; leukocytes increased similarly[1]. At this point, four fingerbreaths from the lateral tuberosity of the fourth dorsal vertebra, we personally brought a pulmonary tuberculosis fever in a terminal case from a constant 39 C to 37½ C overnight with abundant expectoration. The fever remained low for several weeks. This was before the advent of antibiotics. We also treated several acute bronchites at this point, also at a point in the radial groove at a two or three fingerbreadth above the fold of the flexion of the wrist.

Chinese Theory

The general theory of Chinese acupuncture is that the majority of diseases are produced by the Iang or excess of energy or the Inn or diminution of energy. In diseases of the Iang one must disperse (white metal, our hypo needles) and pain is generally considered an Iang. In diseases of the Inn one must use gold needles (not necessary) to tonify or moxibustion: heat.

Moxibustion or Kai, in a less sophisticated manner, is practiced in Egypt and other Arab countries in the treatment of diseases. In these countries non-physicians seem to be quite versed in the Art. There is no doubt that general or systemic conditions can be treated by acupuncture as described in books presently available, but will require special studies of meridians and points. The points can be key points or accessory points. A more sophisticated approach would also be the study of Chinese pulses, 12 in all.

Importance of Local Acupuncture and Rationale

We consider acupuncture a powerful adjunct to our classical therapies.

Acupuncture, as described here, and I am sure we are not the only one to have thought of the practicality of recognizing trigger points, can be the only source of relief for local and non-lesional pain. It works frequently when the local infiltration does not.

Notwithstanding the theory or theories behind Chinese acupuncture, we may assume that the introduction of the needle creates

locally an irritation or counter-irritation and therefore an apport of blood and improvement of the circulation. But this is our humble explanation for a therapy, whose dramatic manifestation does not cease to astonish us.

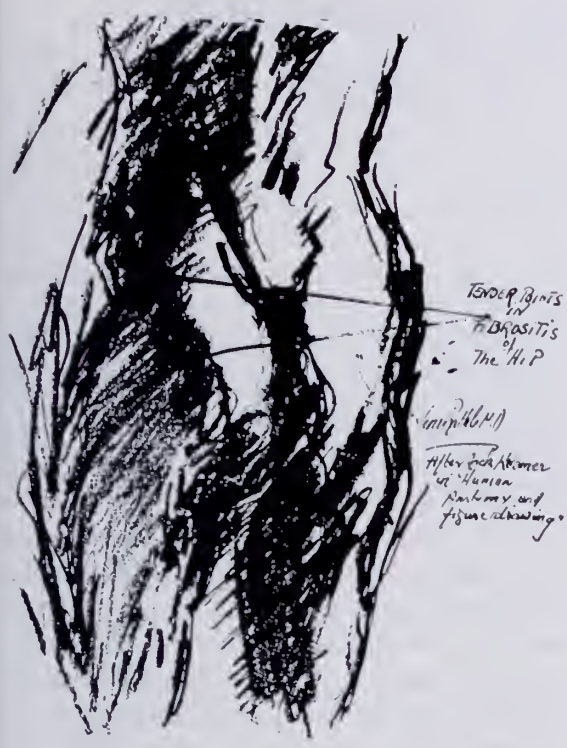
Whether the tendinites or fibrosites are or viral origin, infectious, allergic, traumatic or spasmodic, they still generally improve with acupuncture probably faster than other methods. In our experience and by simple logic, no systemic cortisone derivatives are justified when the algia can be treated locally. In practice, the physician has the choice between local infiltration and acupuncture.

Indications

The most frequent ones in practice are fibrosites or tendinites of the lower back, upper back, hip, trapezius, sterno-cleido-mastoid, the latter often involved in whiplash injuries, tennis elbow, etc. *How deep?* In shallow surfaces or in the chest wall, needles no longer than 5/8" 25 G taking into consideration, the underlying vital organs. In other more fleshy areas needles from 1" 23 G and up to 1½" 21 G. The practitioner must try. *How long?* Our experience shows that 20 - 30 minutes is the optimum duration.

Incidents or Accidents

We have not envisioned nor did we encounter any. Avoid arteries, veins and nerves. Sometimes a vein or veinule is hit and the blood ozzes; change place. Sometimes there is an ecchymosis even though no blood was visible at insertion.



Is it auto suggestion or hypnosis? This will always be asked. Personally, and although confidence in the physician plays a role, we have ceased to think in those terms. However, if the purists insist that hypnosis is involved, we respectfully recommend that hypnosis be performed exactly in this manner.

Summary

Regional or loco dolenti acupuncture to treat regional or local conditions with our own needles may be the only recourse we have in some fibrosites, tendinites, etc. Notwithstanding the philosophy of the standard acupuncture, it is without doubt a simplification of the method if results are obtained. It deserves a trial by all facing the pain syndrome.

BIBLIOGRAPHY

1. French Consul in Shanghai (1878-1955) who introduced Acupuncture in Europe, also translated several Chinese treatises.

2. George Soulie de Morant: L'acuponcture Chinoise, 1,000 pages, Editions Maloine' - SA - Paris, 1939-1957.

3. Dr. H. Voisin - L'acuponcture du practicien' Maloine SA - Publisher, Paris, 1972.

4. T. Nakayama, as translated by T. Sakurazawa and G. Soulie de Morant. Editions Hippocrate, Paris, 1934.

5. Felix Mann, M. B. Acupuncture, The Ancient Chinese Art of Healing and How it Works Scientifically. Vintage Books, Edition 1973.

Amniotic Membrane As Wound Dressing

Researchers in California are experimenting with amniotic membranes as a temporary dressing to relieve pain and stop infection of surface wounds.

Dr. John D. Trelford, of the University of California at Davis, is experimenting with sheep and the amnion from the sacks of unborn lambs.

Dr. Trelford has found that the amnion blocks fluid loss, stops infection, relieves pain and allows healing to take place. This material remains alive up to eight days when used as a covering for surface wounds.

The amniotic membrane has been used successfully in plastic surgery of the female vulva, and as a temporary dressing for a burned child.

The membrane may eventually be used as a standard application in the field of medicine, according to the National Society for Medical Research.

The Impact Of Changing Pesticide Usage On The Medical Community

Anne R. Yobs, M. D.
Chamblee, Georgia

The use of chemical substances has been increasing steadily in the modern world, filling man's physical environment with a myriad of substances which are potentially toxic to man himself or to parts of his environment. In trace amounts in the human body, some substances have no demonstrable effects, and others are essential to life; in larger amounts, these same substances may be toxic.

Similarly, the number and usage of pesticide products has increased significantly during the last 30 years with the availability of organic chemicals for convenient, effective, and economical pest control in a wide variety of situations. Benefits have included increased food production and control of disease vectors and nuisance pests. At first, relatively little effort was directed to safe application and controlled use of these chemicals, and knowledge of possible harmful side effects did not keep pace with the development of chemical pesticides. Beginning in the late 1940's, evidence developed that certain chlorinated hydrocarbon compounds such as DDT, accumulate in fatty tissues of fish, birds, other wildlife, and man. Later studies showed that excessive concentrations of these pesticide residues have adverse effects on reproduction, physiology, and behavior in some birds and represent a threat to wildlife. The hazard to future generations of man is not known, but results of controlled experiments in laboratory animals indicate a need for further investigation.

The general use of DDT in this country was cancelled by the U. S. Environmental Protection Agency effective December 31, 1972, following several years of intensive review and inquiry into the environmental and human health hazards related to the use of this chemical. This administrative action will necessitate a change to other available chemicals, such as organophosphates and carbamates, which have been marketed for a number of years.

They are more easily broken down in the environment and in biologic systems and therefore pose less risk of long-range contamination and buildup in the environment. However, many of the chemicals which will be substituted for DDT are highly toxic and present greater short-range acute hazard to the user and to others coming into direct contact with them. Since these replacement chemicals are less stable, more frequent application will be required to maintain the same level of pest control, thereby further increasing the hazard—particularly to untrained users.

Project Safeguard, an intensive educational program directed to farmers at risk in 14 States, is a joint effort of the U. S. Environmental Protection Agency, U. S. Department of Agriculture, and the State Cooperative Extension Services. The target States include those Southern and Southeastern States where the greatest use of DDT has occurred in recent years in the treatment of their major crops, cotton, peanuts, and soybeans. A special effort is also being made to alert physicians and emergency health personnel in these States to the potential problem and to review diagnostic and treatment measures with them.

Everyone engaged in health delivery should become familiar with all aspects of pesticide poisoning including prevention, populations at risk, signs and symptoms, diagnostic confirmation, and treatment. Re-

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Dr. Yobs is Chief, Training and Education Branch, Operations Division, Office of Pesticide Programs, U. S. Environmental Protection Agency.

view of all pertinent details is not possible within the space allotted, but a few salient points should be emphasized.

Pesticide poisoning is preventable if the user reads and observes all label instructions regarding usage, storage, and disposal. At risk are not only the farmers or applicators, but also their helpers and families.

Pesticides may be absorbed by ingestion, by inhalation, or through the intact skin as a result of negligence, accident, or deliberate action. Absorption of certain organophosphates is at least as effective following dermal exposure as after ingestion. Dermal exposure is of major importance in occupational poisonings, accounting for 77.5 per cent of the cases of occupational poisonings by industrial and agricultural chemicals in California in one year (Kay, 1964). There is wide variation in the toxicity of individual compounds within a given group of pesticide chemicals such as the organophosphates. Malathion has a low toxicity, while Temik, TEPP, and ethyl parathion have considerably higher toxicity. Both the organophosphates and the carbamates inhibit acetylcholinesterase; organophosphates are permanent inhibitors, carbamates reversible inhibitors.

Illness results from accumulation of excess acetylcholine and, while similar, may vary in intensity from compound to compound and group to group. Signs and symptoms include sweating, headache, giddiness, miosis, tearing, increased salivation, excessive respiratory tract secretions, nervousness, blurred vision, weakness, nausea, vomiting, abdominal cramps, diarrhea; subsequent symptoms include chest discomfort, cyanosis, papilledema, muscle twitches, and, in most severe cases, convulsions, coma, and loss of reflexes and sphincter control. Miosis is commonly present, but mydriasis may occur; in either, pupils are nonreactive (Hayes, 1963).

If symptoms begin more than 6 hours after the last known exposure, the illness is probably due to some cause other than pesticides. The end of exposure may be difficult to determine, especially if the patient does not practice good personal hygiene or continues to wear contaminated clothing or protective equipment.

Rapid delivery of correct treatment in suspected cases of pesticide poisoning is of primary importance. Treatment consists of *Support, Decontamination,* and *Specific Antidotes* where available. Support therapy includes, most importantly, administering artificial respiration when indicated, while maintaining a free airway. Mechanical means may be used if available; if not, mouth-to-mouth resuscitation should be followed. Oxygen should be administered when cyanosis or severe respiratory difficulty is present.

Sedatives may be used with caution to combat hyperexcitability or convulsions; sodium phenobarbital is the drug of choice because of its rapidity of action but should be used with care when there is respiratory impairment. After continuation of respiration has been assured, decontamination of the patient should follow promptly to end exposure to the toxic chemical. Depending on the circumstances of exposure, decontamination may include one or more of the following: removal of contaminated clothing, washing of skin and hair, rinsing of eyes, gastric lavage or induction of vomiting, and eventually evacuation of the intestinal tract.

Specific antidotes are not known for all pesticides, but antidotes of considerable value are available for use in organophosphate poisoning. They are safe enough to administer cautiously on the basis of symptoms before the diagnosis is firmly established. Favorable response to the antidote helps confirm the diagnosis. (Absolute confirmation requires laboratory analysis of proper samples to prove that a sufficient amount of the chemical was in the body at the time of onset of illness.)

Atropine sulfate is a physiological antidote which does not affect the inhibited cholinesterase but blocks the action of acetyl-

choline on parasympathetic receptors. Atropine sulfate should be administered to adults in doses of two-four mg intravenously as soon as cyanosis is overcome and should be repeated every five-ten minutes until signs of atropinization appear. In all cases where atropine treatment is indicated, a mild degree of atropinization should be maintained for 24 hours and for 48 hours or more in severe cases. Doses for children should be proportional to weight, about 0.05 mg/kg body weight. Patients poisoned by organophosphates show an unusual tolerance to atropine because of the accumulation of excess acetylcholine.

Pralidoxime chloride (2-PAM chloride) (Protopam® Chloride, Ayerst Laboratories) is a specific antidote for poisoning by organophosphates, acting to break the bond between the enzyme and the pesticide metabolite. Treatment is more effective if started early and should always be given in conjunction with atropinization. The dose is 1 g for an adult and 0.25 g for infants, given slowly and preferably by infusion for 15-30 minutes. If infusion is not practical, the dose may be given slowly by I. V. injection as a 5 per cent solution in water over *not less than 2 minutes.* If the first dose produces improvement, it may be repeated after an hour. *2-PAM is contraindicated in suspected carbamate poisoning.*

Patients who require treatment with antidotes should be watched continuously for not less than 24 hours, because serious and sometimes fatal relapse can occur due to continuing absorption or dissipation of the effects of antidotes.

A pamphlet entitled "Diagnosis and Treatment of Poisoning by Pesticides" developed by Project Safeguard discusses pesticide poisoning in more detail and is available in single copies on request to the author.

References

Kay, K. 1964. Environmental toxicology in industry and agriculture. Arch. Environ. Health. 8:208-211.

Hayes, W. J., Jr. 1963. Clinical handbook on economic poisons. Reprinted October 1971. U. S. Environmental Protection Agency, U. S. Gov. Print. Off. Washington, D. C.

New FP Text Scheduled

The first definitive work on the discipline of family practice is now off the press. *Family Practice* is a basic text for students and residents in family practice, and may be used also as a reference for practicing physicians.

The volume covers a wide range of subjects, including family psychodynamics, the management of chronic illness, interviewing techniques, sex counseling, treatment of chemical abuse, and managing the health care team. In addition, it includes 15 chapters on the clinical components of family practice.

Dr. Thomas W. Johnson, formerly director of the Education Division of the American Academy of Family Physicians; Dr. Robert Rakel, chairman of the Department of Family Practice at the University of Iowa College of Medicine, and Dr. Howard Conn, staff member of Uniontown (Pa.) Hospital are co-editors. Contributors include a number of physicians in family practice education and private family practitioners.

According to W. B. Saunders, publishers, "No other book brings together so much information tailored specifically to the needs of the family physician and primary care specialist."

The library description: *Family Practice.* Conn, Rakel and Johnson. W. B. Saunders Co., West Washington Square, Philadelphia, Pa., 19105. About 1,065 pages, 350 figures. About $33.00.

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He has Trichomonas vaginalis?

It's his infection but her problem...

Men with trichomonal infection are virtually always asymptomatic, which is why they seldom know they have the disease. But many do have it, nevertheless.

Trichomonal infection is so common that estimates[1] indicate one out of every four women of reproductive age has the disease. *Almost half of the husbands of women infected with* Trichomonas vaginalis *have it, too.*[2-9]

CONCURRENT THERAPY WITH FLAGYL PROVIDES ALMOST CERTAIN CURE FOR BOTH OF THEM.

- It is the most effective drug available for the treatment of trichomoniasis in both men and women.
- In men, it eliminates infection from the genitourinary tract.
- In women, it eliminates trichomonal infection from the vagina, the paravaginal crypts, cavities, and glands.
- Consistent cure rates above 90 percent are to be expected. The rate often approaches 100 percent.
- Simple, sure treatment for women: One 250-mg. tablet three times daily for ten days.
- Simple, sure treatment for men: One 250-mg. tablet twice daily for ten days concurrent with treatment of the female partner.
- Side effects are generally mild and infrequent.
- Flagyl is economical because it is so effective.

Flagyl® can cure them both.

(metronidazole)

Indications: For the treatment of trichomoniasis in both male and female patients and in the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture. The oral tablets are indicated also for acute intestinal amebiasis (amebic dysentery) and amebic liver abscess.

Contraindications: Evidence or history of blood dyscrasia, active organic disease of the CNS, the first trimester of pregnancy and a history of hypersensitivity to metronidazole.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to those pregnant patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, pruritus, dysu cystitis, a sense of pelvic pressure, dyspareu fever, polyuria, incontinence, decrease libido, nasal congestion, proctitis, pyuria a darkened urine have occurred in patients ceiving the drug. Patients receiving Fla may experience abdominal distress, naus vomiting or headache if alcoholic bevera are consumed. The taste of alcoholic bev ages may also be modified. Flattening of T wave may be seen in ECG tracings.

Dosage and Administration: For Tric moniasis. *In the female;* One 250-mg. tal orally three times daily for ten days. Cou may be repeated if required in especially st born cases; in such patients an interval of f to six weeks between courses and total and ferential leukocyte counts before, during, after treatment are recommended. Vaginal serts of 500 mg. are available for use, parti larly in stubborn cases. *When the vaginal serts are used,* one 500-mg. insert is placed h

e vaginal vault each day for ten days and
eral dosage is reduced to two 250-mg. tab-
t aily during the ten-day course of treat-
e Do not use the vaginal inserts as the sole
r of therapy. *In the male:* Prescribe Flagyl
l when trichomonads are demonstrated in
e rogenital tract, one 250-mg. tablet two
m daily for ten days. Flagyl should be taken
th partners over the same ten-day period
h it is prescribed for the male in conjunc-
o vith the treatment of his female partner.

o **Amebiasis.** *Adults:* For acute intestinal
m iasis, 750 mg. orally three times daily
n to 10 days. For amebic liver abscess, 500
0 mg. orally three times daily for 5 to 10
a. *Children:* 35 to 50 mg./kg. of body
e it/24 hours, divided into three doses,
for ten days.

ge forms: Oral tablets 250 mg.
Vaginal inserts 500 mg.

References:

1. Perl, G., and Ragazzoni, H.: Flagyl in Treatment of "Trichomonas Vaginalis" Vaginitis, Obstet. Gynecol. *19*:595-598 (May) 1962. **2.** Kean, B. H.: Trichomoniasis in Males (Letters to the Journal), J. A. M. A. *186*:273 (Oct. 19) 1963. **3.** King, A. J.: Current Therapeutics: CLVI.—Metronidazole in the Treatment of Trichomonal Infections, Practitioner *185*:808-812 (Dec.) 1960. **4.** Watt, L., and Jennison, R. F.: Clinical Evaluation of Metronidazole: A New Systemic Trichomonacide, Br. Med. J. *2*:902-905 (Sept. 24) 1960. **5.** Watt, L., and Jennison, R. F.: Metronidazole Treatment of Trichomoniasis in the Female, Br. Med. J. *1*:276-279 (Feb. 3) 1962. **6.** Teton, J. B., and Treadwell, N. C.: Evaluation of a Systemic Trichomonacide, Obstet. Gynecol. *21*:356-362 (March) 1963. **7.** Durel, P.; Roiron, V.; Siboulet, A., and Borel, L. J.: Systemic Treatment of Human Trichomoniasis with a Derivative of Nitro-Imidazole, 8823 R. P., Br. J. Vener. Dis. *36*:21-26 (March) 1960. **8.** Bertrand, P., and Leulier, J.: Essais cliniques sur la trichomonase des partenaires des femmes infestees (Proceedings of the 1st Canadian Symposium on Non-Gonococcal Urethritis and Human Trichomoniasis, Montreal, 1959), Gynaecologia *149*:93-96 (Suppl.) 1960. **9.** Poole-Wilson, D. S.: The Diagnosis and Management of Chronic Infection of the Bladder, Practitioner *186*:429-437 (April) 1961.

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"Banding" Analysis Weapon In Fight Against Birth Defects

Early warning of potential birth defects with unprecedented accuracy, even before a child is conceived, will be made available on a broad scale for the first time under a new diagnostic service announced today by MetPath Inc., one of the nation's leading independent clinical laboratories.

The new program will provide doctors across the country with ready access to a highly sophisticated laboratory technique in cytogenetic analysis known as "banding," which identifies abnormal human chromosomes from blood cultures. It will aid doctors in determining the risks potential parents face in producing children with mental, physical and behaviorial deficiencies and abnormalities. It also can detect the existence of possible chromosome disorders in infants and children where a doctor or parent may suspect slow development.

Due to its complexity and high cost, cytogenetic banding analysis previously has been limited to only a handful of the nation's largest hospitals and university-affiliated research centers.

Dr. Paul A. Brown, founder and chairman of MetPath, said the program could play a major role in helping to fight birth defects, both through its broad availability and reasonable fee structure. "We expect the greatest interest in this new service to come from obstetricians and gynecologists in cases where a patient's family has any history of birth defects, and from pediatricians who might suspect chromosomal aberration in a child," Dr. Brown said.

He added that, in addition to providing the laboratory analysis, MetPath also will provide physicians with free consultation.

Initially, the company will offer four types of cytogenetic analysis. These include routine chromosomal analysis, chromosomal analysis of abnormalities of sexual development, Philadelphia chromosome study and chromosome breakage study. These tests can identify chromosome deficiencies in children as well as in "carrier" adults with a high risk factor of producing children with mental retardation, mongolism, abnormal sexual development, leukemia and other mental or physical deficiencies.

Fees for the tests, to be paid by the patient, will range from $50 to $125.

Doctors need only draw the required blood specimen, and forward it to MetPath's central laboratory in Hackensack or to any of its satellite facilities in Boston; Amherst, Mass.; Plainfield, N. J.; Yonkers, N. Y.; Council Bluffs, Iowa; or Omaha, Neb. Satellite facilities will trans-ship the specimen by air to Hackensack where the cytogenetic analysis will be performed. Results will be teleprocessed back to stations of origin.

Dr. Brown said MetPath's cytogenetic laboratory will operate under the direction of Saundra E. Villafane, a leading cytogenetic technologist, who joins the company from Columbia University. Ms. Villafane, who has worked with the nation's leading cytogeneticists, also is associated with Hackensack (N. J.) Hospital, where she has served as a cytogenetics consultant. She has been engaged in the field of human genetics almost since its emergence as a clinical science and has worked extensively with both Giemsa and Fluorescent banding techniques, which represent the latest state of the art.

"This program represents a significant step in MetPath's goal to provide doctors with the most advanced laboratory techniques and capability to enhance their patient services," Dr. Brown said.

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

The lesions on his face are solar/actinic— so-called "senile" keratoses... and they may be premalignant.

Solar, actinic or senile keratoses

These lesions may be called by several names, but they usually can be identified by the following characteristics: The typical lesion is flat or slightly elevated, of a tan, whitish or reddish color, papular, dry, rough, adherent and sharply defined. They commonly occur as multiple lesions, chiefly on the exposed portions of the skin.

Sequence of therapy—selectivity of response

After several days of therapy with Efudex® (fluorouracil), erythema may begin to appear in the area of the lesions; this reaction usually reaches its height of unsightliness and discomfort within two weeks, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied.

Acceptable results

Treatment with Efudex provides highly favorable cosmetic results. Incidence of scarring is low. This is particularly important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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This patient's lesions were resolved with

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5% cream/solution...a Roche exclusive

Alcohol For Male Sterilization?

Animal experiments have revealed that a new chemical method for male sterilization seems to be effective without side effects.

Researchers at Johns Hopkins Hospital have been injecting alcohol into the ducts of the testes of rats and dogs. There appears to be little or no pain involved in the procedure. Harmful side effects have not yet been reported.

The new technique produces an obstruction of the excretory duct of the testes. This results in sterilization, which lasts as long as six months, according to Drs. Coy Freeman and Donald S. Coffey.

The National Society for Medical Research says this type of basic research must continue with increased public support if scientists are to learn more about the reproductive process.

Painless Removal Of Decayed Teeth

A chemical called GK-101 may soon remove the fear and possibly the discomfort of visiting the dentist.

GK-101 is sprayed on the decayed area where it dissolves the darkened areas painlessly without harm to the surrounding healthy tooth material.

Drs. Joseph H. Kronman and Melvin Goldman of Tufts Dental School collaborated on development and testing of the decay dissolver.

According to the scientists, drilling will sometimes be necessary, but in a very limited way.

The National Society for Medical Research will continue to keep the public informed of further advances in this and other areas of biomedical research.

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections, an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea. In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl) 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

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*Since many strains are known to be resistant, routine sensitivity testing is recommended.

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BUTISOL Sodium offers prompt, smooth, relatively non-cumulative action: begins to work within 30 minutes...yet, because of its intermediate rate of metabolism, generally has neither a "roller-coaster" nor a "hangover" effec

BUTISOL Sodium is remarkably well tolerated: a 30-year safety record assures you that there is little likelihood of unexpected reactions.

BUTISOL Sodium saves your patients money: costs less than half as much as most commonly prescribed sedative tranquilizers.*

These are four good reasons for prescribing BUTISOL Sodium for the many patients who need to have the pace set just a little slower. Its gentle daytime sedative action is often all that's needed to help the usually well-adjusted patient cope with temporary stress.

*Based on surveys of average daily prescription costs.

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Contraindications: Porphyria, sensitivity to barbiturates, or susceptibility to dependence on sedative-hypnotics. **Warning:** May be habit forming. **Precautions:** Exercise caution in: moderate to severe hepatic disease; withdrawa in drug dependence or the taking of excessive doses over a long period, to avoid withdrawal symptoms; elderly or debilitated patients, to avoid possible marked excitement or depression; use with alcohol or other CNS depres because of combined effects. **Adverse Reactions:** Drowsiness at daytime sedative dose levels, skin rashes, "hang and gastrointestinal disturbances are seldom seen. **Usual Adult Dosage:** For daytime sedation, 15 mg. to 30 mg. t.i.d. or q.i.d. For hypnosis, 50 mg. to 100 mg. **Available as:** Tablets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. 5 cc. (alcohol 7%). BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg., 30 mg., 50 mg., 100 m

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INAUGURAL ADDRESS

This Is The A. M. A.

RUSSELL B. ROTH, M. D.
PRESIDENT
AMERICAN MEDICAL ASSOCIATION

Thirty-four years ago, during my senior year in medical school, one of my professors published a book. It was called "Medicine at the Crossroads."[1] One needs to read only to the second page of the "Foreword" to learn that it concerns the "crisis" in medical care, and that if the profession does not voluntarily mend its ways the government will take over.

Apparently, in the view of some, my contemporaries and I have lived our entire professional careers either stalled at the same crossroads, or impaled on the sharp point of a crisis, depending on one's choice of metaphors. Somehow or other, it hasn't really seemed that way.

A thirty-four year old volume on the socio-economics of medicine is scarcely a source for currently valid statistics. How quaint it may seem is apparent from the fact that the high cost of medical care is equated to $4 a day hospital rooms, and to physician incomes of $2,235 per year.

Yet the allegations of crisis seem to have been the same. I quote: "The practice of medicine today costs too much, there is too much lost motion, and it takes too many men. It is most uneconomical and is a distinct luxury."

It would also seem that the villain in the piece was the same. I quote again: "For organized medicine to take such a reactionary view of the public policy as it has taken can lead to but one end—government control."

Even the remedies proposed were the same—comprehensive pre-paid group practice of the type which had been instituted

(Continued on Page 108)

Presented at the 1973 Annual Meeting, June 27, 1973, New York City.

Bernheim, Bertram M., Medicine at the Crossroads, William Morrow & Co., N. Y., 1939

Because you practice medicine in the Cotton State...

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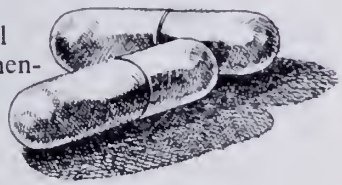

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ecautions: In elderly and debilitated, limit dosage to smallest ective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; crease gradually as needed and tolerated). Though generally t recommended, if combination therapy with other psycho- pics seems indicated, carefully consider individual pharma- logic effects, particularly in use of potentiating drugs such as AO inhibitors and phenothiazines. Observe usual precautions presence of impaired renal or hepatic function. Paradoxical actions (*e.g.*, excitement, stimulation and acute rage) have en reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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by the Ross-Loos group in California some ten years previously, elimination of fee-for-service for physicians, especially for surgeons, and a campaign for better public relations to improve the physician's image.

I believe I did learn a bit of surgery from my erst-while professor, but clearly I did not absorb too much else or I would not be here before you today. He was not my well-spring of inspiration to work within the AMA. Concerning its leadership, he said this: "With regard to medical matters, many doctors do not even know who the President of the American Medical Association is, and they are not interested. Upon occasion he is an outstanding man, but for the most part he is not; and in any case he is only a figure-head."

I am well aware that there are today many who will say that Doctor Bernheim, my professor, was precisely on target. On the other hand, it is intriguing to note that as critics carp, gnats buzz, and gadflies sting, in essentially the same way, decade after decade, the profession forges steadily ahead, making progress.

Clearly our profession has **not** been stalled at any crossroads. Progress at almost break-neck speed, has been a perilous part of our problem, leading a distinguished predecessor of mine, Dr. Dwight Wilbur, to incorporate in his inaugural address the thought that our vehicle must not only have motive power and a steering mechanism, but it must also be endowed with brakes.

Perhaps the reactions of some of our critics have not changed, but almost everything else in medical practice has—its technology, its economics, and my area of special concern today, a growing body of obligations and responsibilities for those who participate within it.

I am of the opinion that our profession does indeed have a multitude of broad societal obligations and responsibilities which increase in scope and number as our capacities increase to do good and useful things for people.

There is little difficulty in recognizing what they are, but there is substantial difficulty in determining the mechanisms through which the obligations may be met, and the responsibilities be discharged.

It is my thesis that the individual physician can do little about them on his own, and that only through the collective actions of organized physicians can these jobs be done.

There is little challenge to the assertion that the American Medical Association is the pre-eminent organization of physicians in this Nation—strong, and growing stronger. At one time its pre-eminence was apparent to anyone who would look. In some respects it may be less towering and less visible today, not because of any diminution of its own stature, but because, as a part of the great growth in medicine and its specialties, there has been an emergence of other organizations—in surgery in medicine, in family practice and on through the roster.

Still and all, while sharing with others the ever-more difficult task of exerting leadership in the pure science of medicine, the AMA has remained the bastion of professionalism, and the stronghold of responsible socio-economic leadership. It is in the exercise of this kind of leadership that the AMA is now coming to play its most important role—for society at large, and for physicians in particular.

Time was when the new-fledged physician could select his spot for practice and busy himself just doing the things for which he was trained—the diagnosing and the treating of the ills of those who came to him for help. No one really demanded that he do more. Today this is not so. A profession populated exclusively by individuals concentrating solely on patient care would be a profession in deep default to society.

The collective force, the impact, of a profession can only equal the sum of the individual efforts and contributions of its mem-

bers. If each physician were, in effect, to retire to the back of the cave, sheltered from the winds of controversy, concerning himself only with the practice of medicine in its narrow sense, our collective force would be close to nil. Our broader responsibilities would indeed pass by default to those who would be delighted to shoulder them for us.

Despite the exciting and encouraging emergence of socio-economic awareness in our ranks, particularly among young physicians who used to be so preoccupied with the attainment of scientific knowledge and technical skills, there has been a slowness to grasp the importance of a collective defense of excellence and professionalism in public service.

There has seemed to be some failure in distinguishing between the social significance of the country club and the medical society.

Too often the question is, "What does the medical society do for me?", or even more pointedly, "Why should I pay dues to the AMA?" The focus is obviously a narrow one in which the benefits of membership are perceived to be subscriptions to journals that may remain unread, or access to meetings that may go unattended. In my view, these are among the least of the virtues of organized medicine.

The valid question should be: "How may I be responsive to the many demands which are being made upon the profession of which I am a part?" "How can I do my share?"

Medical education provides an excellent case in point. It surely is an obligation of our profession to make certain that oncoming generations of physicians shall be well and appropriately trained.

We cannot forget that it was not until the cooperative efforts of the AMA and the Carnegie Foundation were mobilized that quality in medical education was required, or that standards were devised and imposed.

Nor should we conclude that things are different now, and that somehow, sui generis, medical education will in its own right be great and good and dedicated to the needs of the Nation. Medical education has changed precipitously in character in this past decade, and may need to change even more rapidly in the next.

Medical academicians have largely been concerned with the pursuit of excellence—the production of superb clinicians, skilled researchers, and prolific contributors to the literature. There are those among us who believe that a parallel concern must now be developed which will be dedicated to a diffusion and dissemination of that great store of excellence which we have already accumulated.

We must contrive to design new schools, expand existing schools, and perhaps to educate new kinds of physicians. This, I submit, is not the exclusive province of the deans and professors. There is a valid and important place for pragmatic practicing-physician input.

The medical society can and does pull all of this together for us. We can be proud and grateful that so many of the most respected deans, professors, and medical educators are not only active participants in organized medicine, but are willing to work in harness with practicing physicians in important monitoring for the present and planning for the future.

The AMA Council on Medical Education recruits qualified, interested individuals from among us who give liberally of their time and talents to face up to our responsibilities.

Beyond the confines of the medical school there are major areas of reliance upon us in the fields of graduate medical education. The public needs to be assured that those who represent themselves as specialists are, in truth, competent and well-trained. This, too, is a significant undertaking of the Department of Medical Education and its Council.

(Continued on Page 112)

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with cardiovascular disease; develop
chest pains or other aggravations of c
cular disease requires a reduction in do

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dial infarction. **Side effects:** The effects
THROID (sodium levothyroxine) therapy
in being manifested. Side effects, when
occur, are secondary to increased rate
metabolism; sweating, heart palpitati
or without pain, leg cramps, and wei
Diarrhea, vomiting, and nervousness
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most cases with side effects, a reduction of se followed by a more gradual adjustment d will result in a more accurate indication patient's dosage requirements without the rance of side effects.

e and Administration: The activity of mg. SYNTHROID (sodium levothyroxine) T is equivalent to approximately one grain d, U.S.P. Administer SYNTHROID tablets ingle daily dose. In hypothyroidism with- yxedema, the usual initial adult dose is g. daily, and may be increased by 0.1 mg. 30 days until proper metabolic balance is ed. Clinical evaluation should be made ly and PBI measurements about every 90 Final maintenance dosage will usually from 0.2-0.4 mg. daily. In adult myxedema, ig dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, U.S.P., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. *49*:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

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(Continued from Page 109)

It has worked, and continues to work, importantly in the establishment of specialty boards, in the operation of residency review committees, in the approval and inspection of internships, and in multiple liaison activities with the Association of American Medical Colleges, the great specialty societies, the American Boards, and their counterparts at state and local levels. The one great National Congress on Medical Education for a full exploration of problems and points of view is an AMA undertaking.

Beyond this there is the responsibility for continuing medical education, to insure that the graduate physician does not simultaneously open his practice and close his books to begin a precipitous descent into obsolescence. Few of us, as individuals, can do a great deal about such things.

And then, of course, there is our obligation to the public to do our best to dispel ignorance, to overcome fear and superstition, and to promote the virtues of scientific medical care—preventive, diagnostic and therapeutic. In this the medical societies work with the great voluntary health agencies such as the Cancer Society and the Heart Association, as well as with official health agencies, and a bevy of responsible health columnists in the press.

It is discouraging, of course, to find irresponsible elements of the communications media together with certain politicians, labor leaders, and the like simultaneously doing their misdirected best to undermine public confidence and to instill fear by distorted threats of millions of unnecessary surgical operations, large numbers of incompetent physicians, dangerous hospitals, lethal drugs, and prospects of financial ruin.

There must be those among us who will persist in constructive educational measures, and who will work to make the destructive forces recognize the disservice they are doing.

Akin to this is the need to root out the nonscientific substitutes for rational medical care. The fakes, the frauds and the quackeries need to be identified, exposed, and, if possible, eradicated.

This is not an easy task. A gullible public is all too easily entranced with food faddism and pseudo-scientific diets. Legislators have been all too willing to incorporate chiropractic benefits into federal and state health care programs. Uncontrolled acupuncture has been legalized in at least one jurisdiction.

Yet where individuals have been able to do little, the AMA has acted effectively in helping to put an end to Hoxsey-type promotions, to expose Krebiozen, and on and on and on.

It is plaintly contrary to the public interest to permit the development of new kinds of health professionals without supervision and controls.

On the one hand, it seems possible to educate and train men and women to fill immensely useful roles in supplementation of, and extension to, the work of physicians.

On the other hand, there is the possibility that new kinds of pseudo-professionals, ill-trained and uncontrolled, might turn the clock back to the pre-Flexner—AMA days of diploma mills and dubious credentials.

How does one train and certify a nurse-practitioner, a surgical technician, or a urological assistant before he or she may safely be incorporated in the full spectrum of scientific medical care?

What should the curriculum contain, how is competence to be assessed, and what shall the legal circumscriptions be?

These problems have been, and continue to be, major concerns of the AMA in conjunction with allied organizations. The public is being well served.

And then there are hospitals—those com-

(Continued on Page 114)

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(Continued from Page 112)

plex, sophisticated, and expensive workshops for our profession. There are many important concerns for us in respect to their accreditation, their function in graduate and continuing education, and the quality of their services to the public. It would be idle to talk of the tripartite governance of hospitals—trustees, administration, and professional staff-without liaison and cooperation between the three. Who better than the medical profession can evaluate the gaps and overlaps which may exist in a community, and the opportunities for correcting them?

What institutional facilities are needed; what proposals are uneconomical; and what professional talents should be recruited?

How many hospitals best be used as back-up for alternative, less-costly ambulatory out-patient care without sacrifice of quality?

Is it necessary for physicians to unionize in order to maintain perspective and a balance of properly distributed authority?

Consider the whole area of medical service to the public—access, quality, financing mechanisms and controls. Should these things be left to others, or should they be the intimate concerns of the profession which does the work and holds the best potential for a proper ordering of priorities?

The individual physician uniformly finds it hard to make his voice heard and his convictions felt unless he combines his efforts with those of his colleagues through his county or state medical society or the AMA. Here he is potentiated by expert, able staff, and reinforced by men and women competent in law, insurance, economics and business management. The AMA Division of Medical Practice is an impressive collection of such expertise.

Almost every practicing physician has his concerns with insurance companies, voluntary pre-payment plans, pre-paid comprehensive group practice arrangements, and government programs. He would be hard-pressed to maintain liaison with them, to cooperate with them, to argue with them or to negotiate on his own. Massive may be the frustration which is generated in trying. There is far better chance of success if there are people to do it with him, and for him.

There are divers important linkages and interrelationships to be maintained with others in the health professions—dentists, osteopaths, nurses, pharmacists and the rest. These extend beyond the specific field of medical service into joint concerns with the legal profession over professional liability, with the clergy over the intimate relationships between medicine and religion, and with the insurance industry for a broad spectrum of important identities cf interest.

Perhaps the most important area for service to the public is the area of legislation—past, present and proposed, local, state and federal. In our last Congress there were some 2,400 bills of medical significance at the national level alone. No individual physician could keep up with all of them. No Congressman or Senator could have considered opinions about each.

The range of these proposals is the full range from arch-conservative to ultra-liberal. From the broad societal point of view, many must be good, constructive and progressive. Many must be ill-conceived, impractical, or downright dangerous. Some one—some group—must analyze them and develop positions of support or opposition. This is a prime role for organized medicine. The AMA Council on Legislation—physician members fortified by an able staff in Chicago and in Washington—do this job extraordinarily well.

Our profession is kept in important touch with legislative proposals, their progress through the tortuous channels of hearings, executive sessions, conference committees and even vetoes. Opportunities for our professional input are watched, and at times effectively created.

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(Continued on Page 116)

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(Continued from Page 114)

source for factual information, and as a contact with the practicing physicians. Not only are personal contacts with most of our legislators well maintained, but meetings between representative physicians from our states and from specialty organizations are effectively arranged. At state society levels, and often at county society levels, comparable jobs are done by medical association personnel.

It has been my personal observation, over a decade, that where once the voice of the practicing medical profession was largely unheeded or unheard, the situation has changed.

It is no accident that we now have close to 200 Senators and Representatives as sponsors of our Medicredit bill.

It is no accident that some of the impractical solutions offered for an imagined crisis in medical service have been de-glamorized, stripped of political expediency, and exposed as unsuited to the needs of the Nation.

There will be those who disagree, but it is my conviction that an overwhelming majority of our legislators want to reach correct solutions for the perceived problems in the sphere of medicine, and they want sound professional guidance. This we are becoming progressively more able to provide.

Congress has not really derived an immense sense of accomplishment from the inordinately expensive programs it has created.

There is a slowly growing appreciation of the fact that physicians are not so much a part of the problems as they are an essential part of the solutions to the problems. They must be heard, and their views must be respected. Under any system or program that may be legislated upon them, they will be the ones to do the work.

The combined forces of organized labor, a prestigious Committee of One Hundred, and a powerful coalition of political figures in Congress could not contrive to generate the necessary push to enact a compulsory national medical care delivery law which would promise what could not be delivered, at a price we would be reluctant to pay, through a vast new administrative bureaucracy which challenges the imagination.

The people who would be the recipients, and the physicians who would be the providers, have been well-served by the defenses which are effectively turning back this assault. It has not happened by chance or through uncoordinated efforts. It has not been done by splinter groups.

There is probably no single subject upon which all physicians agree, unless it is that medicine is a worthwhile calling. It is truly fortunate that so many physicians—a substantial majority of those in active practice, taking care of people—are attracted to voluntary membership in our organized societies. No doctor has to belong to a medical society, and no medical society can revoke, suspend or abridge the state-granted right to practice. The wonder is that those voluntary associations exert the influence that they do.

Certainly the public—whether it recognizes it or not—profits immensely because of the role played by these societies in upholding standards of competence and ethical performance. Equally certain is the fact that physicians who have elected not to participate in organized medicine have profited immensely from its activities even though they have not paid their way.

It is new and exciting to find that as young physicians become increasingly interested in socio-economics, in political and governmental intrusions into medicine, and in their own prospects for professional freedom and self-determination, they are now turning to an acceptance of, and enthusiasm for, the AMA.

There is a growing recognition of the fact that physicians must act in concert, and that the convictions of the oncoming generation can become the future association policies if work is done to make them so.

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ons—Placidyl (ethchlorvynol) is indicated t-term hypnotic therapy in the management nnia.

ndications—Drug hypersensitivity and por-

ns—Not recommended during the first and trimester of pregnancy. Caution patients ible combined exaggerated effects with barbiturates, tranquilizers or other CNS ants. Exaggerated effects might result in of vision, paralysis of accommodation and d hypnosis. Caution patients concerning a motor vehicle, operating machinery, or azardous operations requiring alertness af- ng the drug. Administer with caution to with suicidal tendencies and do not pre- arge quantities of the drug. Adjustment of age of oral anticoagulants might be neces- en beginning ethchlorvynol therapy, during or after stopping therapy. This drug is ommended for use in children. PLACIDYL IE POTENTIAL FOR THE DEVELOPMENT CHOLOGICAL AND PHYSICAL DEPEND- INSTANCES OF SEVERE WITHDRAWAL OMS, INCLUDING CONVULSIONS AND UM CLINICALLY SIMILAR TO THOSE SEEN ARBITURATES, HAVE BEEN REPORTED ENTS TAKING REGULAR DOSES AS LOW 0 MG. PER DAY OVER A PERIOD OF HEN THE DRUG WAS SUDDENLY DIS- UED. PROLONGED ADMINISTRATION OF UG IS NOT RECOMMENDED. Addiction- atients or those who are likely to increase of the drug on their own initiative should rved for evidence of signs or symptoms ay indicate possible early withdrawal or ce symptoms. Signs and symptoms asso- ith withdrawal and abstinence include un- xiety, tremor, ataxia, slurring of speech, loss, perceptual distortions, irritability, and delirium. Other less well defined d symptoms, not necessarily due to with- and abstinence, may include anorexia, nau- vomiting, weakness, dizziness, sweating, twitching and weight loss. Abrupt discon- of Placidyl following prolonged overdos- result in convulsions and delirium.

ons—Toxic amblyopia has been reported g-term continuous use of ethchlorvynol. nt visual defects have been observed, al- amblyopia has improved after discontinua- the drug. Drug dosage should be limited ly and debilitated patients to the smallest amount. If pain is present, this drug only be given if insomnia persists after controlled with analgesics. Caution is ad- prescribing the drug for patients who are eated with either MAO inhibitors or anti- ants. Transient delirium has been reported combination of Placidyl and amitryptyline. sage should be reduced if prescribed for receiving MAO inhibitors or antidepres- Caution should be exercised in patients paired hepatic or renal function. Patients ond unpredictably to barbiturates or alco- who exhibit excitement and release of inhi- association with such agents, may also this way to Placidyl. Rarely, patients may symptoms suggestive of an unusual sus- ty to the drug; such as prolonged hypnosis, muscular weakness, excitement, hysteria, pe without marked hypotension. Transient s or ataxia may occur.

Reactions—Hypotension, nausea or vom- istric upset, aftertaste, blurring of vision, s, facial numbness, and allergic reaction by urticaria have been reported following administration. Mild "hangover" and symp- mild excitation have occurred in some There have been rare reports of cholestatic occurring in patients taking ethchlorvynol. ases of thrombocytopenia have been re- patients receiving ethchlorvynol. 302430R

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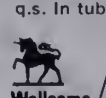
Each gram contains: Aerosporin® brand Polymyxin B Sulf 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 r (equivalent to 3.5 mg. neomycin base); special white petrolat q.s. In tubes of 1 oz. and ½ oz. and 1/32 oz. (approx.) foil packs



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

(Continued from Page 116)

Some may be willing to leave to the government and to external economists the garnering of the statistics by which our profession is judged. Most of us, however, take comfort in objective fact-gathering by our Center for Health Services Research and Development with its growing capacity to generate reliable data and its acceptance in the community of professional economists.

Some physicians may be willing to surrender the controls over the practice of medicine to consumer groups, to labor, or to government.

Some may be willing to concede to hospital domination, to academic medicine, or to the many-splendored associations of public health workers. Most of us would not.

But a passive posture would not be very effective in keeping such things from coming to pass. Something has to be done collectively, by us, unless physicians are content to become technicians in a regulated public utility.

I have left great gaps in recounting the services and functions of the AMA. There has been scant mention of the publications for physicians and laymen alike. Most of the valuable scientific councils and committees and the hundreds of our colleagues who guide their contributions have gone unmentioned. The roster of surrogate services undertaken for the public good is uncommonly long, too long to inflict on a patient audience which scarcely needs the recitation.

My hope has been, not to evangelize you, but to state in terms that may be helpful to you an evangelistic point of view which you may carry forth.

I would like to close with what may be a truism rather than a profound new observation, yet I offer it almost as a benediction. Grant us a profession populated by men and women of competence, integrity, and a will to do their best for their people, and we will give you care for the health of our Nation without the need for restrictive systems, intricate controls, or massive governmental interventions. This is what the AMA is all about.

Acupuncture Therapy

One of the most detailed contemporary books on acupuncture, "Acupuncture Therapy," was published in the June 1973 issue by Temple University Press.

Written by Dr. Leong T. Tan, a San Francisco urologist; Margaret Y.-C. Tan, associate medical specialist at the University of California at San Francisco, and Dr. Ilza Veith, professor and vice chairman of the Department of Health Sciences at the University of California at San Francisco, the book offers one of the most informative, detailed and expert appraisals of acupuncture to be found in today's medical literature.

It is based on translations from Chinese acupuncture literature ranging from "The Yellow Emperor's Classic of Internal Medicine," written in the 4th Century, B. C., to the most sophisticated of modern texts on the subject currently in daily use in the People's Republic of China.

Not only does the book develop a comprehensive picture of the various uses of acupuncture as an analgesic, a maintainer of bodily equilibrium and an aid in the relief of certain kinds of emotional illness, it also discusses electric acupuncture, a recent adaptation of modern technology to one of the most ancient of medical practices in which the acupuncture needles are electrified and the stimulation caused by the electric current is substituted for the stimulation formerly generated by the manual twirling of the acupuncture needles.

"Acupuncture Therapy" is a medical text-

(Continued on Page 122)

around the state

Vital Statistics

NEW MEMBERS

Calhoun County

Gibbins, George Marshall, b 44, mc Alabama 69, recip. NBME 70, 1029 Christine, Anniston, Alabama 36201. Oph.

Colbert County

McCoy, Ronald Wayne, b 40, mc Illinois 66, recip. NBME 72, 505 North Columbia Avenue, Sheffield, Alabama 35660. I.

CHANGES OF ADDRESS

Barbour County

Doyle, James Corcoran, present Eufaula to Lakeview Drive, St. Francis Point, Eufaula, Alabama 36027.

Bibb County

Owings, Clyde Lacey, Brent, Alabama, to 472 Stonegate Road, Ann Arbor, Michigan 48103.

Coffee County

Ferlisi, Joseph Angelo, Enterprise, to 311 South Memorial Drive, Prattville, Alabama 36067.

Cullman County

Crocker, Francis Lauren, Jr., present Cullman to Box 1123, Cullman, Alabama 35055.

Etowah County

Shaddix, Marion L., present Gadsden to Box 4305, Gadsden, Alabama 35904.

Jackson County

Elmore, Gary Sylvester, Stevenson to Box 5658, Saraland, Alabama 36571.

Jefferson County

Benton, John William, Jr., present Birmingham to 1601 6th St. South, Birmingham, Alabama 35233.

Carter, John Carson, present Birmingham to 3928 Montclair Rd., Suite 120, Birmingham, Alabama 35213.

Collier, Sidney Wixforth, present Birmingham to 3516 Lakeside Drive, Birmingham, Alabama 35243.

Finney, James Owen, Sr., present Birmingham to 900 - 19th Street South, Birmingham, Alabama 35233.

Lee, James Monroe, present Birmingham to 801 Princeton Avenue, S. W., Birmingham, Alabama 35211.

Muths, Frederick August, Birmingham, Alabama to 2003 Carnwood Rd., Cleveland, Tennessee 37311.

Parnell, Leighton Calhoun, Jr., present Birmingham to 3928 Montclair Rd., Suite 120, Birmingham, Alabama 35213.

Shirley, Sheridian William, present Birmingham to University of Alabama, University Station, Birmingham, Alabama 35294.

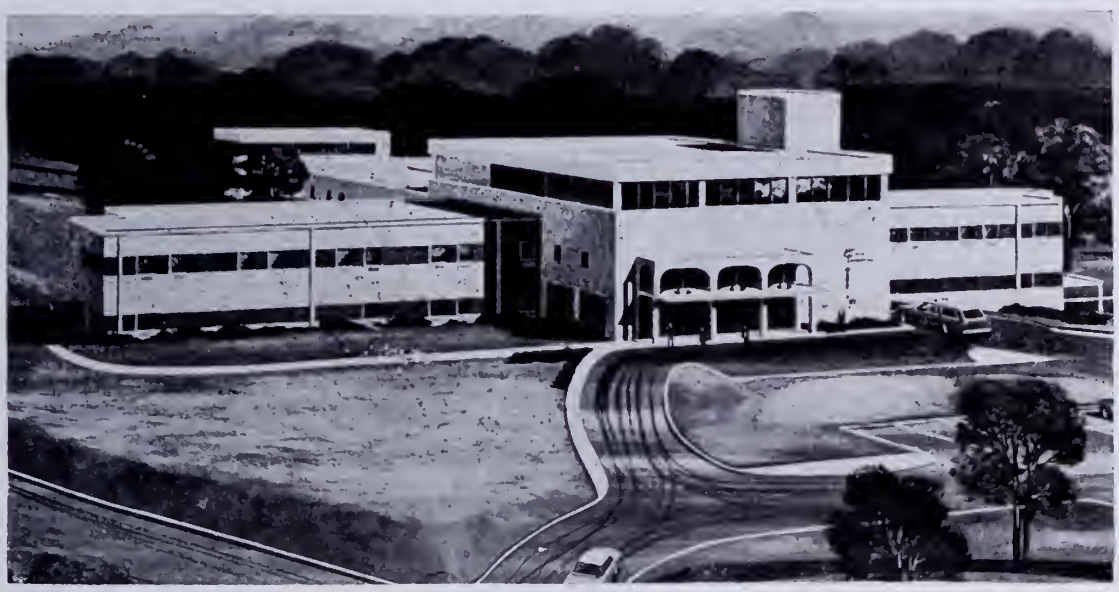
Shopfner, Charles Ewell, Birmingham to 2451 Fillingim Street, Mobile, Alabama 36617.

Watanabe, Haruki, present Birmingham to 1720 8th Avenue, South, Birmingham, Alabama 35233.

Morgan County

Crouch, Wilbourne Ray, present Hartselle to Medical Arts Building, 307 West Pine Street, Hartselle, Alabama 35640.

(Continued on Page 122)



Hill Crest HOSPITAL

For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospital, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

PSYCHIATRISTS:

James K. Ward, M. D.
Hardin M. Ritchey, M. D.
F. Joseph Nuckols, M. D.
James A. Greene, M. D.
Charles W. Moorefield, M. D.

ADMINISTRATOR:

Robert V. Sanders

DIRECTOR OF SOCIAL SERVICES:

James T. Kemp, A. C. S. W.

HILL CREST HOSPITAL

Hill Crest Foundation, Inc.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: 205-836-7201

(Continued from Page 120)

Perry, William John, present Hartselle to Medical Arts Building, 307 West Pine Street, Hartselle, Alabama 35640.

Pike County

Colley, Jesse Hall, present Troy to Box 314, Troy, Alabama 36081.

Tallapoosa County

Michaels, Lawrence, present Alexander City to Associated Surgeons, P. A., Medical Arts Building, Alexander City, Alabama 35010.

Tuscaloosa County

Richardson, Luther Washington, Jr., present Tuscaloosa to 900 - 15th Street East, Tuscaloosa 35401.

Willard, William Robert, present Tuscaloosa to University of Alabama, Tuscaloosa, Alabama 35486.

NEW TELEPHONE NUMBERS

Alford, J. H., Jr., Montgomery 265-7001

Benton, J. W., Jr., Jefferson 934-4974

Bernhard, C. B., Jr., Jefferson 744-8010

Gibbins, G. M., Calhoun 237-0371

McCoy, R. W., Colbert 383-5524

Nelson, J. H., Tuscaloosa 556-2121

Ritchey, H. M., Jefferson 838-1218

CHANGE OF SPECIALTY

Lee County

Klinner, Kent Vernon, Jr., from Pd to **GP.**

CORRECTIONS

Jefferson County

Crowe, Aubrey Derrill

Mobile County

Cobb, Jephta Blacksher, change Zip Code to 36609.

DALE COUNTY MEDICAL SOCIETY

Officers For Year of 1973

President—R. J. McLaughlin—Delete

Vice-President—T. D. Caffey—Delete

Sec.-Treas.—B. D. Petrey—Delete

President—T. D. Caffey—Add

Vice-President—N. W. Holman—Add

Sec.-Treas.—R. J. McLaughlin—Add

Censors—T. D. Caffey, Chairman, L. D. McLaughlin, G. L. Andrews, R. F. Zumstein, N. W. Holman, incorrect listing.

Censors—B. D. Petrey, Chairman, T. D. Caffey, L. D. McLaughlin, G. L. Andrews, R. F. Zumstein, correct listing.

(Continued from Page 119)

book and is not written for the layman. For the physician interested in acupuncture, it will prove a valuable aid, since it is well illustrated with a wealth of diagrams and tables giving detailed information on the ancient art of acupuncture and its modern applications.

As the general interest in acupuncture grows, "Acupuncture Therapy" could become a standard reference book for physicians and skilled therapists.

"Acupuncture Therapy" may be ordered directly from: Temple University Press, Philadelphia, Penna., 19122, or by phoning the Temple Press at (215) 787-8787. It is also available in most medical bookstores. The price is $15.00.

Who says knocking doesn't pay? Consider the hammer. Of course, a good one doesn't lose its head and fly off the handle. It finds the point and drives it home. Sometimes it looks on the other side and clinches the matter. It keeps pounding until the job is done. It is the only knocker in the world that does constructive work.

Decubitus Ulcers Yield to

Travase® Ointment

brand of **Sutilains**

re treatment, necrotic matter coated the r surfaces of this decubitus ulcer.

After six days of TRAVASE therapy, debridement is nearly complete and granulation evident.

tive Therapy—
e its Effects in 48 hours

he recommended nursing technique is d without deviation, this procedure can e visible improvement within 48 hours ment. If no dissolution of slough by then, further application is unlikely warding (recheck for break in ure, usually due to use of cleansing or tic agents which impair the eness of the enzyme in TRAVASE).

bservation and photos by Kathleen Brough M D Marion County Home, Indianapolis, Ind.

see next page for bing information

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Travase® Ointment brand of Sutilains

APPLICATION TECHNIQUE: TRAVASE Ointment is indicated as an adjunct to established methods of wound care for biochemical debridement. It dissolves and facilitates the removal of necrotic tissues and purulent exudates.

TRAVASE enzymes are selective. Virtually inactive on viable tissue.

When this recommended nursing technique is followed without deviation, this procedure can generate visible improvement within 48 hours . . .

(Ulcer being irrigated) Thoroughly cleanse and irrigate the wound area using only sterile water or sodium chloride solution. Be sure to cleanse the wound of any antiseptics or heavy-metal antibacterial agents which may interfere with the enzyme activity.

Thoroughly soak the wound area. Where practical, tubbing or showering is suitable. Or wet soaks with gauze pads may be used. Remember to avoid chemical cleansing agents which may interfere with the therapy.

With a sterile cotton swab or finger cot, apply a very **thin** layer of TRAVASE Ointment. The ointment spreads easily and only a small amount is needed (a small dab of ointment will cover an area as big as the back of a hand).

Be sure, though, to rub the ointment well into every crack or crevice of the wound and overlap the surrounding skin one-fourth to one-half inch beyond the area to be debrided—to be sure of complete coverage.

Apply loose, wet dressings, thoroughly soaked in sodium chloride solution or sterile water to the area to be debrided only.

Cover the moist dressings with an occlusive wrap (Saran wrap, Telfa Pads, or other plastic wrappings) to keep wound site moist. Do not extend occlusive wrap over ½ inch beyond area to be debrided.

When changing dressing, gently wipe away the dissolved material. Repeat the complete dressing procedure, including application of TRAVASE Ointment, four times daily.

The ulcer shown in these photos is simulated on a model in order to demonstrate the correct TRAVASE application technique.

To: FLINT LABORATORIES
Division of Travenol Laboratories, Inc.
200 Wilmot Road
Deerfield, Illinois 60015

Name _____

Title _____

Institution _____

Street _____

City _____ State _____ Zip _____

Please send:

_____ Additional Information on TRAVASE® Ointment (brand of Sutilains)

_____ In-service training program

_____ Comment _____

DESCRIPTION: TRAVASE® (brand of sutilains) Ointment is a sterile preparation of proteolytic enzymes, elaborated by **Bacillus subtilis**, in a hydrophobic ointment base consisting of 95% white petrolatum and 5% polyethylene. One gram of ointment contains approximately 82,000 casein units* of proteolytic activity.

ACTION: TRAVASE Ointment selectively digests necrotic soft tissues by proteolytic action. It dissolves and facilitates the removal of necrotic tissues and purulent exudates that otherwise impair formation of granulation tissue and delay wound healing.

At body temperatures these proteolytic enzymes have optimal activity in the pH range from 6.0 to 6.8.

INDICATIONS: For wound debridement, TRAVASE Ointment is indicated as an adjunct to established methods of wound care for biochemical debridement of the following lesions:

Second and third degree burns,
Decubitus ulcers,
Incisional, traumatic, and pyogenic wounds,
Ulcers secondary to peripheral vascular disease.

CONTRAINDICATIONS: Application of TRAVASE (brand of sutilains) Ointment is contraindicated in the following conditions:

Wounds communicating with major body cavities,

Wounds containing exposed major nerves or nervous tissue,

Fungating neoplastic ulcers,

Wounds in women of child-bearing potential—because lack of laboratory evidence of effects of TRAVASE upon the developing fetus.

WARNING: Do not permit TRAVASE Ointment to come into contact with the eyes. In treatment of burns or lesions about the head or neck, should the ointment inadvertently come into contact with the eyes, the eyes should be immediately rinsed with copious amounts of water, preferably sterile.

PRECAUTIONS: A moist environment is essential to optimal activity of the enzyme. Enzyme activity may also be impaired by certain agents. **In vitro**, several detergents and antiseptics (benzalkonium chloride, hexachlorophene, iodine, and nitrofurazone) may render the substrate indifferent to the action of the enzyme. Compounds such as thimerosal, containing metallic ions interfere directly with enzyme activity to a slight degree, whereas neomycin, sulfamylon-streptomycin, and penicillin do not affect enzyme activity. In cases where adjunctive topical therapy has been used and no dissolution of slough occurs after treatment with TRAVASE Ointment for 24 to 48 hours, further application, because of interference by the adjunctive agents, is unlikely to be rewarding.

In cases where there is existent or threatening invasive infection, appropriate systemic antibiotic therapy should be instituted concurrently.

Although there have been no reports of systemic allergic reaction in humans, studies have shown that there may be an antibody response in humans to absorbed enzyme material.

ADVERSE REACTIONS: Adverse reactions consist of mild transient pain, paresthesias, bleeding and transient dermatitis. Pain usually can be controlled by administration of mild analgesics. Side effects severe enough to warrant discontinuation of therapy occasionally have occurred.

If bleeding or dermatitis occurs as a result of the application of TRAVASE (brand of sutilains Ointment, therapy should be discontinued. No systemic toxicity has been observed as a result of the topical application of TRAVASE Ointment.

Dosage and Administration

STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FOR EFFECTIVE RESULTS OF TREATMENT

1. Thoroughly Cleanse and Irrigate Wound Area with sodium chloride or water solutions. Wound **MUST** be cleansed of antiseptics or heavy-metal antibacterials which may denature enzyme or alter substrate characteristics (e.g., Hexachlorophene, Silver Nitrate, Benzalkonium Chloride, Nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbing, showering, or wet soaks (e.g., sodium chloride or water solutions).
3. Apply TRAVASE Ointment in a thin layer assuring intimate contact with necrotic tissue and complete wound coverage extending ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for best results.

How Supplied

3P3002 TRAVASE Ointment is supplied sterile in one-half ounce tubes (14.2 g.) containing 82,000 casein units of sutilains per gram of hydrophobic ointment base.

The ointment must be stored under refrigeration at 2° to 10° C (35° to 50° F).

*A casein unit is the amount of enzyme required to produce the same optical density at 275 mμ as that of a solution of 1.5 mcg. tyrosine/ml. after the enzyme has been incubated with 35 mg. of casein at 37° C. for one minute.

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC
Morton Grove, Illinois 60053

Questions And Answers

Methadone Treatment Programs
FDA Regulations

(1) WHAT IS A METHADONE TREATMENT PROGRAM?

A methadone treatment program is a program approved by the State Authority and the FDA to utilize methadone for the treatment of narcotic dependent individuals. This treatment program must provide access for its patients to a full range of rehabilitative and medical services.

Methadone may be utilized in such a treatment program for either or both of the following types of treatment: Detoxification treatment, which must be accomplished within a time period of three weeks, and methadone maintenance treatment, which consists of the administration of methadone over an extended period of time.

Methadone treatment programs are encouraged to offer both detoxification treatment and maintenance treatment, since as wide a spectrum of services as possible will serve to attract potential patients into treatment and to effectively serve those individuals once they are in treatment.

(2) WHAT IS DETOXIFICATION TREATMENT?

Detoxification treatment is the medically supervised withdrawal with methadone from a state of physical dependence on opioid drugs in connection with the provision of necessary medical and rehabilitative services as outlined in the FDA regulations. This type of treatment must be completed within a three week time period.

No take home medication is allowed in detoxification treatment. That is, the patient must come seven days per week to the clinic for on-site, observed methadone ingestion.

(3) WHERE CAN DETOXIFICATION TREATMENT BE ACCOMPLISHED?

Detoxification treatment may be accomplished on an out-patient basis under the auspices of a methadone treatment program or on an in-patient basis in a hospital which has been approved by the State and the FDA under conditions for use of methadone in hospitals, as specified by 130.44 (f) of the regulations. Hospitals wishing to provide detoxification treatment on an out-patient basis would need to make application to be a methadone treatment program, as specified by 130.44 (d).

(4) DOES THE THREE-WEEK TIME CONSTRAINT IN THE DEFINITION OF DETOXIFICATION APPLY TO PATIENTS ON METHADONE MAINTENANCE WHO ARE BEING WITHDRAWN FROM METHADONE?

No. The gradual withdrawal of methadone from patients who are already stabilized on methadone in a methadone treatment program is not defined by the regulations as "detoxification". This period of gradual withdrawal from methadone may extend over whatever period of time is deemed clinically appropriate.

(5) WHAT SERVICES MUST BE PROVIDED BY METHADONE TREATMENT PROGRAMS?

In addition to medication dispensation, a methadone treatment program must provide, as a minimum, counselling, rehabilitative and social services (e.g. vocational and education guidance, employment placement) which will help the patient become a well-functioning member of society. A treatment program must also provide a comprehensive

range of medical services. All services must be readily available to the patients. The program will be held accountable if the patient is in need of these and is unable to obtain them. This does not imply that the treatment program itself must provide these services. Such services may be made available as set forth in documented agreements. It is not possible to define precisely what minimum services must be provided at the site of the program. There is a great variety of conditions that will necessitate the acquisition of these services at other facilities. It is essential that the program sponsor assume the responsibility for providing the entire range of services and has documentation to that effect. FDA and State Authorities will be checking on not only the availability but the utilization of these services at the time of on-site inspections.

(6) MUST A PATIENT UNDERGOING DETOXIFICATION IN A METHADONE TREATMENT PROGRAM BE PROVIDED WITH THE SAME SERVICES AS A PATIENT ON METHADONE MAINTENANCE AT THAT PROGRAM?

No. But, these services must be available to all patients since all methadone treatment programs can be approved only if they have a full range of services necessary for maintenance. Past experience with detoxification without the provision of ancillary services has demonstrated only limited success. The program should see that the patient is offered the full range of rehabilitative services and is strongly encouraged to make use of these. These services should be continued even after reaching a drug free state until stability has been demonstrated to the satisfaction of the program sponsor.

(7) WHAT IS METHADONE MAINTENANCE TREATMENT?

Methadone maintenance is a modality of treatment which is carried on in a methadone treatment program and which consists of the administration of methadone over an extended period of time (exceeding a three-week period) in conjunction with the provision of necessary rehabilitative and medical services as outlined in the regulations. Specifically, methadone maintenance may be construed as the administration of methadone for any period of time over twenty-one days. An eventual drug-free state is the treatment goal for patients, although it is recognized that for some patients the drug may be needed for long periods of time. However, there is no implication that methadone must be given over long periods of time; the dosage schedule for each patient should be reviewed on an individual basis and constitutes a medical decision.

(8) WHAT IS A MEDICATION UNIT?

A Medication Unit is a facility—e.g. a physician's office, a clinic, an industrial plant facility, a community pharmacy—which has been approved by the State and the FDA as part of a methadone treatment program. to provide for the administration of methadone and the collection of urine samples for patients who are on methadone maintenance treatment. The patients referred to such a unit must have reached a stable dosage level and have shown satisfactory evidence of progress toward rehabilitation. Detoxification as a specific treatment modality may not be carried out in a Medication Unit. It should be noted, however, that the gradual withdrawal of methadone for patients who are stabilized on methadone may be carried out at such facilities providing that such withdrawal is under the direction of the methadone treatment program of which the Medication Unit is a part.

(9) MAY A PATIENT WHO IS NOT CURRENTLY PHYSICALLY DEPENDENT ON OPIOID DRUGS EVER BE ADMITTED TO A METHADONE TREATMENT PROGRAM?

It is assumed that the vast majority of patients who enter methadone treatment programs to be placed on methadone maintenance will be physically dependent on an

opioid drug at the time of admission. There are possible exceptions, however, when this may not be the case. An example would be upon release of a patient with a history of opioid drug abuse from a correctional or chronic care institution. The physician must use his clinical judgment to determine what is appropriate justification in such an instance and must document same in the patient's record. At no time, however, may a patient be admitted to detoxification treatment when he is not currently physically dependent on opioid drugs.

(10) HOW LONG MUST AN INDIVIDUAL BE PHYSICALLY DEPENDENT ON OPIOID DRUGS BEFORE HE CAN ENTER A METHADONE TREATMENT PROGRAM?

Detoxification—There is no specific length of time of physical dependence history required. It is only necessary that the person be currently physically dependent at the time of admission and in need of substitutive treatment.

Methadone Maintenance—To qualify for admission to a methadone maintenance treatment program, a patient must have a history of having become physically dependent on an opioid substance at least two years prior to the time of this evaluation.

(11) WHAT IS MEANT BY A TWO YEAR HISTORY OF PHYSICAL DEPENDENCE AS IT RELATES TO THE PATIENT SEEKING ADMISSION TO METHADONE MAINTENANCE?

The onset of physical dependence in a particular case must have been at least two years prior to the time of the current evaluation. This means that the person must have been physically dependent on an opioid drug

(Continued on Next Page)

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two years before the evaluation. That is, had that individual stopped opioid use at the time, he would have experienced a withdrawal syndrome. This, generally, is synonymous with the daily use of opioid drugs for some extended period of time. The individual need not have been continuously physically dependent on opioid drugs during the two year period.

(12) ARE THERE ANY STANDARDS FOR LABORATORIES WHO PERFORM URINE TESTING SERVICES FOR METHADONE TREATMENT PROGRAMS?

In the near future, each methadone treatment program will be required to utilize only those laboratories which participate in the Proficiency Testing Program under the direction of the Center for Disease Control in Atlanta, Georgia. Participating laboratories will be listed and identified to approved methadone treatment programs.

(13) ARE THERE ANY SITUATIONS WHERE PARENTAL CONSENT IS NOT NEEDED PRIOR TO TREATING PATIENTS UNDER AGE 18?

Such treatment is permissible in those States where State Law specifically permits treatment for drug abuse without parental consent. Also, in some States, "Emancipated Minor Statutes" permit such treatment in certain situations.

(14) WHO MAY BE A "PROGRAM SPONSOR"?

A program sponsor may be any person who is willing to assume responsibility for all facets of treatment program activity and who had had Form FD 2632 approval by the State Authority and the FDA. It is not necessary that he be a physician, but he must be able to demonstrate that the treatment program will have the requisite medical and rehabilitative services.

(15) WHO MUST SIGN FORM FD 2633, "MEDICAL RESPONSIBILITY STATEMENT FOR USE OF METHADONE IN A TREATMENT PROGRAM"?

Every physician who is authorized by the program sponsor to prescribe, dispense and/or administer methadone in an approved program must sign Form FD 2633. A physician who, for example, performs general medical services, but does not prescribe, dispense and/or administer methadone, need not sign the form.

(16) MUST EACH TREATMENT PROGRAM HAVE A MEDICAL DIRECTOR?

Yes. One physician must be designated on Form FD 2632 by the program sponsor as having total responsibility for all medical aspects of the particular treatment program. A physician can be a Medical Director at more than one program providing he is able to assume the full responsibility for all medical aspects of the program. Of course, geographical location, type and number of staff, number of patients in treatment plus professional activities of the physician in other than the methadone treatment programs would all have a bearing on this. Ideally, the Medical Director would be responsible for only one program.

(17) WHAT ARE THE RESPONSIBILITIES OF A MEDICAL DIRECTOR?

These responsibilities include, but are not necessarily limited to, evaluation of physical and psychologic dependence, addiction history, medical history and physical examination, providing for the performance of appropriate laboratory tests, and ultimate determination of a prospective patient's acceptance for methadone treatment. When a patient is admitted to treatment, it is the Medical Director's responsibility to assure that the appropriate dosage levels of methadone are prescribed and that changes are made when clinically indicated. He must en-

sure that the individual patient's medical needs are periodically assayed and that appropriate medical services are provided.

(18) MAY A PERSON BE LISTED AS PROGRAM SPONSOR FOR MORE THAN ONE PROGRAM?

Where there is a network of treatment programs centrally administered, the person who directs that administration is considered to be, and must be listed on Form FD 2632, as program sponsor for all treatment programs within that network. In such a situation, one individual at each separate treatment program must also be identified as the person responsible for that particular program. Such an arrangement establishes dual responsibility for each program in the network.

(19) WHAT IS THE MINIMUM STAFFING PATTERN REQUIRED FOR THE OPERATION OF A METHADONE TREATMENT PROGRAM?

There must be at least the equivalent of one full-time physician, two full-time registered or practical nurses, and four full-time counselors for each 300 patients .

"Full-time" is to be considered service during a full work week (35-40 hours).

"Equivalent" means that a number of different individuals within a specified category (physician, nurse or counselor) may work on a part-time basis, provided that the total time by category meets the required minimum.

(20) MAY A TREATMENT PROGRAM WITH FEWER THAN 300 PATIENTS "PRO-RATE" ITS STAFF?

Yes. For example, a treatment program with 150 patients may have as a minimum, 20 hours of physician-time, 40 hours of nurse-time, and 80 hours of counselor-time. Whenever the number of hours exceeds 40 hours per week (as with counselors in the example above), another individual of that category must be added to that program.

(21) IN WHAT WAY MAY A PHYSICIAN PARTICIPATE IN A METHADONE TREATMENT PROGRAM?

A physician may participate in the following ways:

1. He may be a program sponsor. Form FD 2632 must be submitted.
2. He may be a Medical Director. Form FD 2633 must be submitted.
3. He may be medically responsible for prescribing, dispensing and/or administering methadone. Form FD 2633 must be submitted.
4. He may provide any medical services except for prescribing, dispensing and/or administering methadone. These services may be performed at the program site or at an affiliated institution, such as a hospital. He must be listed as performing these services on Form FD 2632.
5. He may be authorized by the program sponsor to operate as a "Methadone Treatment Medication Unit". He must be listed on Form FD 2632.

The medical responsibilities of a physician in a methadone program, whether he serves in a full-time or part-time capacity, are the same as would exist in any type of medical practice. That is, he is held professionally, legally, and ethically responsible in his practice of medicine with drug dependent patients.

(22) MAY A PRIVATE PHYSICIAN TREAT DRUG-DEPENDENT PATIENTS WITH METHADONE?

Yes.

1. A private practitioner may become a program sponsor and will be governed by the same requirements as any other program sponsor. He must develop a treatment program which can provide

the full range of comprehensive services. Supportive services may be made available through documented contractual agreements with other organizations and institutions. The staffing pattern for this type of program must meet the same requirements as those that govern all other programs. It is also his responsibility to see that the patient receives the requisite medical and social rehabilitative services.

2. Detoxification treatment can be provided drug-dependent patients in an approved hospital on an in-patient basis without filing an application as program sponsor for a methadone treatment program.

3. Temporary maintenance treatment can be provided in an approved hospital to a drug-dependent patient who is hospitalized for treatment of a medical condition other than drug dependence and who requires temporary methadone maintenance treatment during the critical period of his stay in order to prevent the development of acute opiate withdrawal.

(23) WHAT IS MEANT BY "AN ADVERSE REACTION TO METHADONE"?

It is the physician, based on his clinical judgment, who determines what should be classified as an adverse reaction. Such designation should be based on the knowledge of the usual effects of methadone in clinical practice. The designated form should be filled out and sent to the FDA within two weeks of an occurrence.

(24) WHAT IS MEANT BY THE TERM "LICENSED PRACTITIONER" IN THE METHADONE REGULATIONS?

Any person authorized by either the Federal Government or the jurisdiction in which he practices to prescribe, dispense or administer Schedule II controlled substances is considered a "licensed practitioner" for purposes of the methadone regulations. This includes a physician, pharmacist, dentist, nurse or other person licensed by the State to dispense or administer controlled substances, as defined by the Controlled Substances Act.

More Studies On Alcoholism

The National Society for Medical Research says San Antonio researchers have concluded the pineal gland has a regulating role in a preference for alcohol, at least, in rats.

Dr. Irving Geller of the Southwest Foundation for Research and Education, says this gland is the only organ, in addition to the eyes, that describes external light conditions to the body. It is connected to the eyes by a series of fibers and as light enters the eyes, the information is transmitted to the pineal.

The gland's activity is inhibited by light and stimulated by dark. Based on this premise, Dr. Geller experimented with alcohol and rats. He found that rats prefer alcohol in the dark than in the light; and speculated that the pineal gland may be involved.

Further studies by four San Antonio scientists on the gland concluded that rats will drink more alcohol in the dark.

Drs. Kenneth Blum, Russell Reiter, Jack Wallace and James Merritt then removed the glands from half of the rats, and determined that the rats without the gland drank little or no alcohol.

These researchers feel further experiments are necessary before the pineal gland's regulating role in alcoholism is firmly established.

Belonging to an association is a test of sportsmanship. The bad sport always drinks on the other fellow; the good sport pays as he goes. He declines to accept the benefits that flow from the cooperation of others without paying his share.

School Policies For First Aid

Ralph H. Kunstadter, M. D., Fellow

American Academy of Pediatrics

Emergency pediatric care incorporates the facilities and skills of personnel in the school system as well as those of hospital and medical centers. The American Academy of Pediatrics recommends that a number of policies be incorporated as guidelines for personnel training and student education to insure the best emergency preparation.

Staff members, especially those teaching and supervising physical education and athletic events, should be competent in first aid techniques. Refresher courses should be offered regularly.

During interscholastic contests of contact and high hazard sports, a physician should be in attendance. He should also be on call during practice sessions.

In an emergency, while first aid is being administered at the school, parents and the student's personal physician should be notified. Later, a notation must be made on the student's health record as to the type of accident or illness and the aid rendered. (A copy of this record may go with the patient if he is transferred to an emergency facility or kept by him for his own files.) If it is necessary to send the student home, he should be accompanied by a school official who will place him in the care of a parent or guardian.

As part of school facilities, a first aid room or area ought to be made available and supplied with sufficient first aid equipment to meet any emergency (blankets, stretchers, folding screen, table, splint material, etc.). First aid kits are to be placed in other parts of the building, handy and ready for use.

First aid education and student training in how to handle emergencies is an important facet of school emergency preparation. First aid classes can be given at all age levels and should even be "obligatory in high schools and for drivers licensure." Skilled students may be singled out for special training so they are prepared in case of a school accident. Several, too, should receive specific instruction if they are involved in after-school activities.

Training should include the maintenance of air passageways (ventilation and artificial respiration), the control of hemorrhage, immobilization of fractures and moving a patient without compounding the injuries.

School first aid's best feature is the prevention of accident. This may be achieved through the practice of "evacuation drills and related emergency procedures." Specific instructions for such procedures should be set down, understood and followed by faculty, staff members and students alike. Such precautionary measures may help reduce the accident count in the athletic field, gymnasium, swimming pool, shower and locker room.

These suggested policies and practices are merely broad guidelines for first aid administration in schools. They are important factors in pediatric emergency medical care because emergencies occur frequently within the school environment.

We have neglected vocational and technical education for the elegant ornament of liberal arts . . . In our society, which needs skilled labor, we must restore the manual arts to their original place of esteem. We have done a grave disservice to the working man by neglecting his central importance in our society.

—*Spiro T. Agnew*

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Division of Hoffmann-La Roche Inc.
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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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tions Acute gouty arthritis, rheumatoid arthritis, atoid spondylitis

ndications: Children 14 years or less; senile pa- history or symptoms of G I inflammation or ul- n including severe, recurrent or persistent dys- history or presence of drug allergy; blood sias, renal, hepatic or cardiac dysfunction; hy- sion, thyroid disease; systemic edema; itis and salivary gland enlargement due to the polymyalgia rheumatica and temporal arteritis, ts receiving other potent chemotherapeutic , or long-term anticoagulant therapy

ngs Age, weight, dosage, duration of therapy, ex- of concomitant diseases, and concurrent potent therapy affect incidence of toxic reactions Care- struct and observe the individual patient, espe- he aging (forty years and over) who have sed susceptibility to the toxicity of the drug Use effective dosage Weigh initially unpredictable s against potential risk of severe, even fatal, re- The disease condition itself is unaltered by the Use with caution in first trimester of pregnancy

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and in nursing mothers Drug may appear in cord blood and breast milk Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation Unexplained bleeding involving CNS, adrenals, and G I tract has occurred The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents Carefully observe patients taking these agents Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid) Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination Swelling of ankles or face in patients under sixty may be prevented by reducing dosage If edema occurs in patients over sixty, discontinue drug

Precautions: The following should be accomplished at regular intervals Careful detailed history for disease being treated and detection of earliest signs of adverse reactions, complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check, pertinent laboratory studies Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc Cases of leukemia have been reported in patients with a history of short- and long-term therapy The majority of these patients were over forty Remember that arthritic-type pains can be the presenting symptom of leukemia

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G I bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G I bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy, CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia, ulcerative stomatitis, salivary gland enlargement (B)98-146-070-H(10/71)

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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

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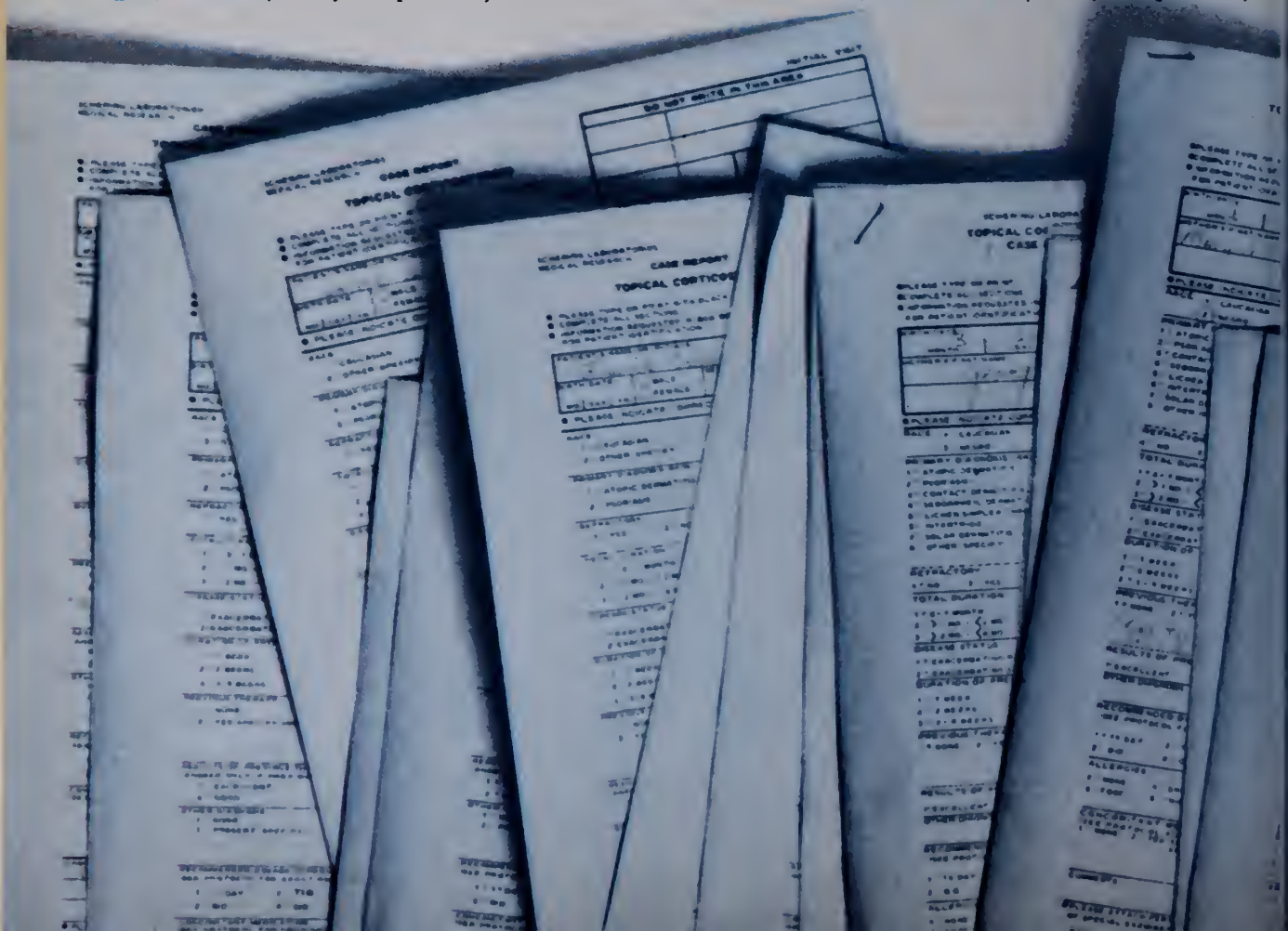

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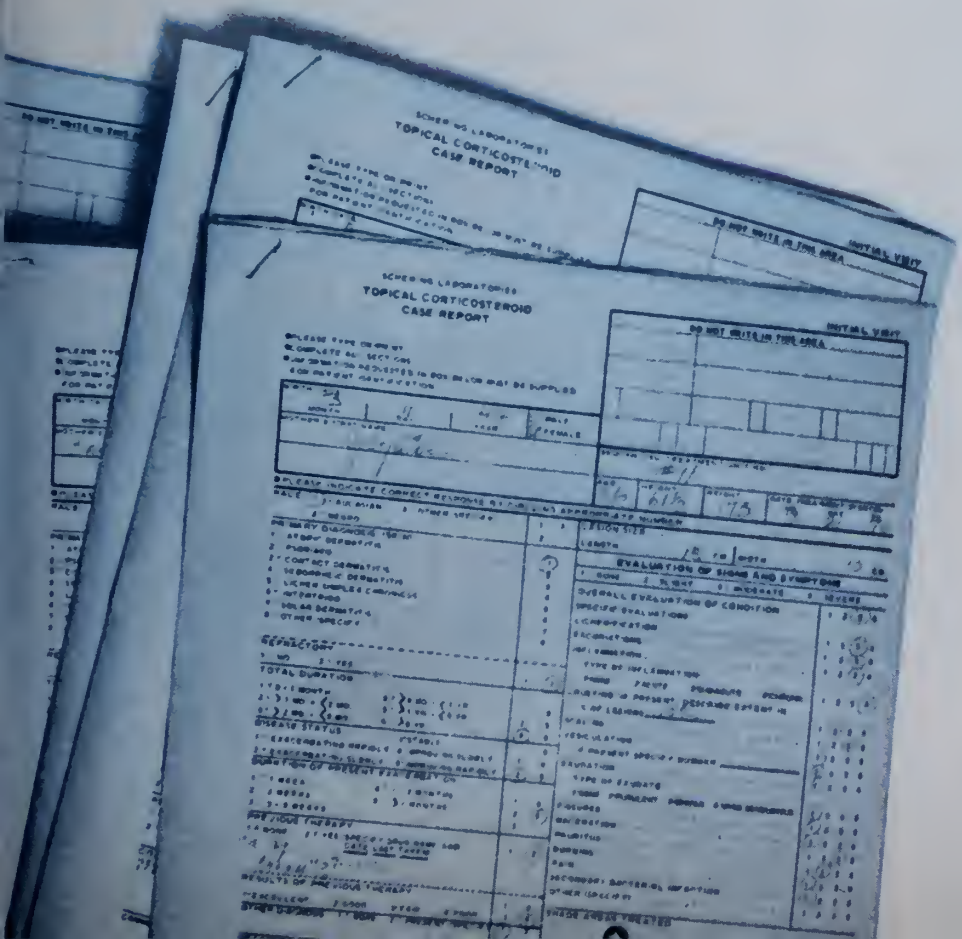

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Description VALISONE products contain betamethasone valerate (9-fluoro-11β,17,21-trihydroxy-16β-methylpregna-1,4-diene-3,20-dione 17-valerate). Each gram of VALISONE Cream 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in a soft, white, hydrophilic cream of water, mineral oil, petrolatum, polyethylene glycol 10 monocetyl ether, cetostearyl alcohol, monobasic sodium phosphate, and phosphoric acid; 4-chloro-m-cresol is present as a preservative. Each gram of VALISONE Ointment 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in an ointment base of liquid and white petrolatum, and hydrogenated lanolin. VALISONE Cream and Ointment contain no parabens.
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Contraindications VALISONE Cream and Ointment are contraindicated in vaccinia and varicella. Topical steroids are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.
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Adverse Reactions The following local adverse reactions have been reported with topical corticosteroids: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneform eruptions, and hypopigmentation. The following may occur more frequently with occlusive dressings than without such therapy: maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.
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References: *(1) Files of Headquarters Medical Research Division, Schering Corporation. (2) Carter, V. H., and Noojin, R. O.: Curr. Therap. Res. 9:253, 1967. (3) Falk, M. S.: Cutis 2:788, 1966. (4) Goldblum, R. W.: Pennsylvania Med. 69:50, 1966. (5) Nierman, M. M.: J. Indiana M. A. 10:1184, 1966. (6) Zimmerman, E. H.: Arch. Dermat. 95:514, 1967.*

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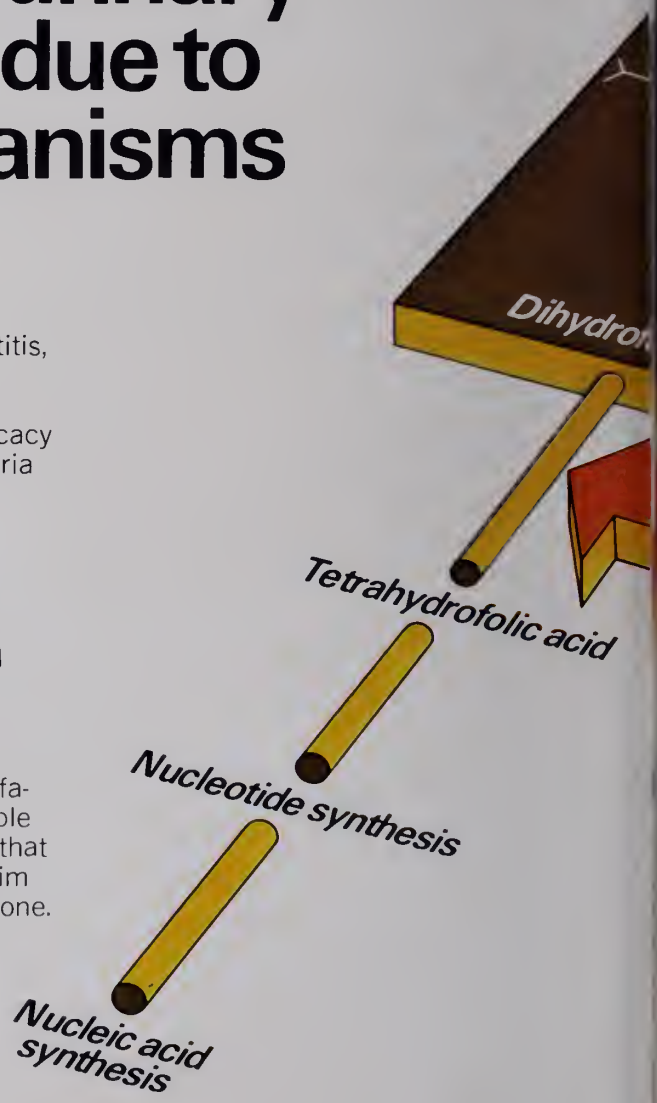
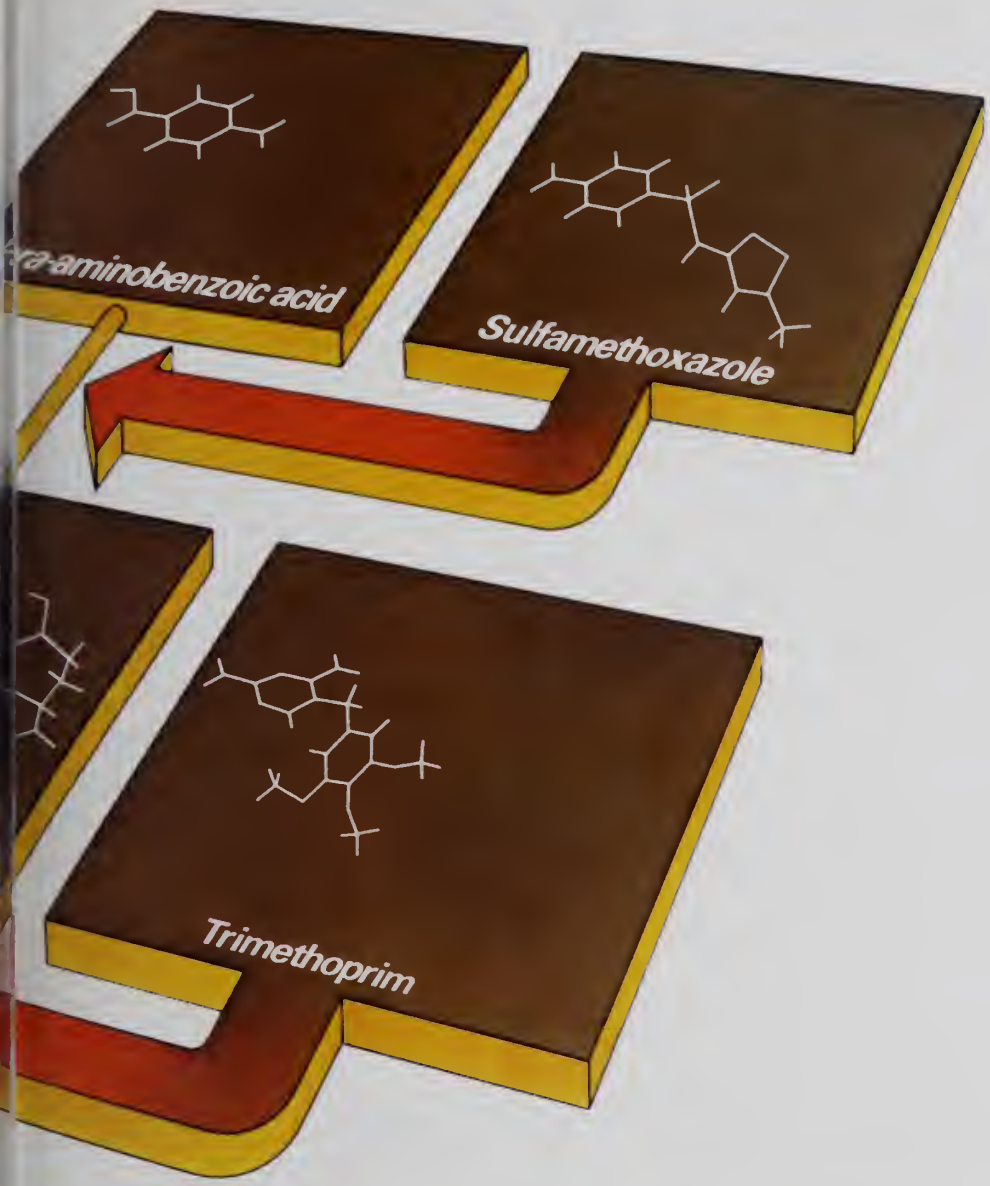


*Please note that clinical conclusions cannot be extrapolated from *in vitro* studies.



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Before prescribing, please see complete product information on last page of advertisement.

Excellent clinical response in chronic urinary tract infections

A multiclinic, double-blind study* of response to a ten-day course of therapy in 471† patients with chronic urinary tract infections demonstrated the superiority of Bactrim. On the 10th day after initiation of therapy, 91.7% (of 168 patients) showed significant bacteriological response to Bactrim compared with 81.2% (of 144 patients) to trimethoprim and 64.5% (of 155 patients) to sulfamethoxazole. In patients with obstructive complications, 10th day response was 94.8% (of 97 patients) to Bactrim, 72.9% (of 85 patients) to trimethoprim and 58.5% (of 94 patients) to sulfamethoxazole.

Excellent response maintained

Bactrim proved equally impressive in maintaining this bacteriological response. In the above study, after ten-day therapy with Bactrim, 68.4% of patients with chronic urinary tract infections maintained response for up to 42 consecutive days, compared with 59.7% with trimethoprim and 44.4% with sulfamethoxazole. In patients with obstruction, 70.8% of those on Bactrim maintained response for up to 42 consecutive days, compared with 49.4% on trimethoprim and 38.8% on sulfamethoxazole. The figures are particularly remarkable in cases with urinary obstruction—cases regarded as being notoriously difficult to treat.

To date, low incidence of significant side effects

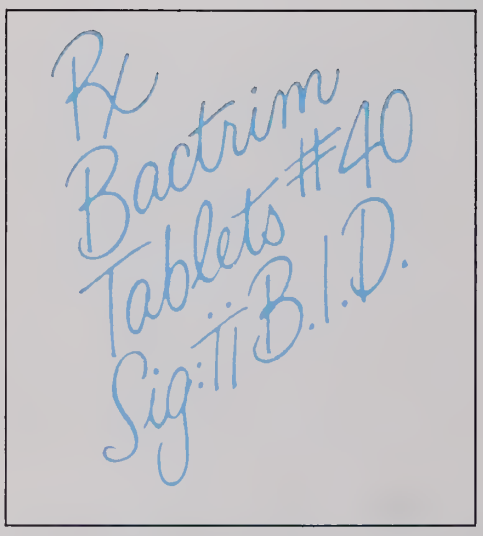
Although Bactrim demonstrated impressive clini results, it is important to note that the incidence clinically significant adverse effects was low, mai nausea and/or vomiting, rash, leukopenia, SGOT increase and creatinine increase.

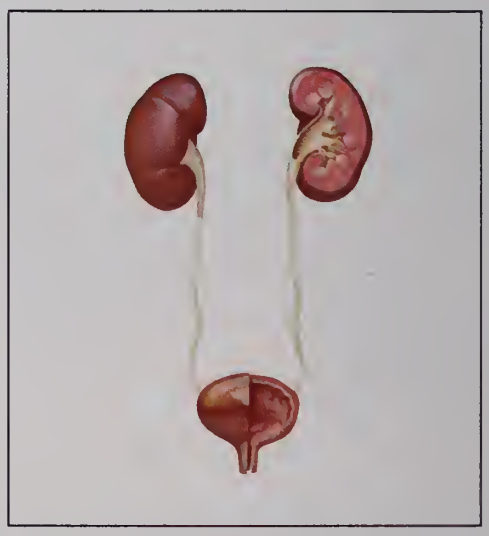
Bactrim should be given with caution to patients with impaired renal or hepatic function, possible folate deficiency and to those with severe allergy bronchial asthma. Adequate fluid intake must b maintained. Complete blood counts, urinalyses careful microscopic examination, and renal func tion tests should be performed during therapy.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of all antibacterial agents, especially in the treatme of chronic and recurrent urinary tract infections

Usual adult dosage: two tablets every twelve ho for 10 to 14 days; no loading dose required.

* Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 0711
† 4 patients not available for evaluation at day 10.





new **BACTRIM**™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, N J 07110

Before prescribing, please consult complete product information on facing page.

ɔlete Product Information:

ɛription: Bactrim is a synthetic antibacterial combination prod- available in scored light-green tablets, each containing 80 mg ethoprim and 400 mg sulfamethoxazole.

ethoprim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine. white to light-yellow, odorless, bitter compound with a molec- weight of 290.3.

methoxazole is N^1-(5-methyl-3-isoxazolyl)sulfanilamide. It is most white in color, odorless, tasteless compound with a mo- ar weight of 253.28.

ns: *Microbiology:* Sulfamethoxazole inhibits bacterial synthesis hydrofolic acid by competing with *para*-aminobenzoic acid. ethoprim blocks the production of tetrahydrofolic acid from di- ɔfolic acid by binding to and reversibly inhibiting the required me, dihydrofolate reductase. Thus, Bactrim blocks two con- tive steps in the biosynthesis of nucleic acids and proteins ntial to many bacteria.

ro studies have shown that bacterial resistance develops more y with Bactrim than with trimethoprim or sulfamethoxazole e.

ro serial dilution tests have shown that the spectrum of anti- erial activity of Bactrim includes the common urinary tract ɔgens with the exception of *Pseudomonas aeruginosa*. The fol- ng organisms are usually susceptible: *Escherichia coli, Kleb- Enterobacter, Proteus mirabilis* and indole-positive proteus ies.

Representative Minimum Inhibitory Concentration Values for Bactrim-Susceptible Organisms
(MIC—mcg/ml)

teria	Trimeth-oprim alone	Sulfameth-oxazole alone	TMP/SMX (1:20) TMP	SMX
herichia	0.05 – 1.5	1.0 —245	0.05—0.5	0.95— 9.5
teus spp. ole positive	0.5 —5.0	7.35 —300	0.05—1.5	0.95—28.5
eus abilis	0.5 —1.5	7.35 — 30	0.05—0.15	0.95— 2.85
siella-erobacter	0.15—5.0	0.735—245	0.05—1.5	0.95—28.5

an Pharmacology: Bactrim is rapidly absorbed following oral inistration. The blood levels of trimethoprim and sulfamethoxa- are similar to those achieved when each component is given e. Peak blood levels for the individual components occur one ur hours after oral administration. The half-lives of sulfameth- ole and trimethoprim, 10 and 16 hours respectively, are rela- the same regardless of whether these compounds are admin- ed as individual components or as Bactrim. Detectable unts of trimethoprim and sulfamethoxazole are present in the 24 hours after drug administration. Free sulfamethoxazole trimethoprim blood levels are proportionately dose-dependent. repeated administration, the steady-state ratio of trimethoprim lfamethoxazole levels in the blood is about 1:20.

amethoxazole exists in the blood as free, conjugated and pro- bound forms; trimethoprim is present as free, protein-bound metabolized forms. The free forms are considered to be the apeutically active forms. Approximately 44 percent of trimeth- m and 70 percent of sulfamethoxazole are protein-bound in the d. The presence of 10 mg percent sulfamethoxazole in plasma eases the protein binding of trimethoprim to an insignificant ee; trimethoprim does not influence the protein binding of amethoxazole.

etion of Bactrim is chiefly by the kidneys through both glomer- filtration and tubular secretion. Urine concentrations of both amethoxazole and trimethoprim are considerably higher than the concentrations in the blood. When administered together Bactrim, neither sulfamethoxazole nor trimethoprim affects urinary excretion pattern of the other.

ations: Chronic urinary tract infections (primarily pyelonephri- pyelitis and cystitis) due to susceptible organisms (usually oli, *Klebsiella-Enterobacter, Proteus mirabilis,* and, less fre- ntly, indole-positive proteus species).

ɔrtant note: Currently, the increasing frequency of resistant organ- is a limitation of the usefulness of all antibacterial agents, espe- in the treatment of chronic and recurrent urinary tract infections.

raindications: Hypersensitivity to trimethoprim or sulfonamides. gnancy and during the nursing period (see Reproduction ties).

ings: Deaths associated with the administration of sulfonamides been reported from hypersensitivity reactions, agranulocyto- aplastic anemia and other blood dyscrasias. Experience with ethoprim alone is much more limited, but it has been reported terfere with hematopoiesis in occasional patients. In elderly ents concurrently receiving certain diuretics, primarily thia- s, an increased incidence of thrombopenia with purpura has reported.

The presence of clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts should be done frequently in patients receiving Bactrim. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued.

At the present time, there is insufficient clinical information on the use of Bactrim in infants and children under 12 years of age to recommend its use.

Precautions: Bactrim should be given with caution to patients with impaired renal or hepatic function, to those with possible folate deficiency and to those with severe allergy or bronchial asthma. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis may occur. This reaction is frequently dose-related. Adequate fluid intake must be maintained in order to prevent crystalluria and stone formation. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Reactions: For completeness, all major reactions to sulfonamides and to trimethoprim are included below, even though they may not have been reported with Bactrim.

Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia.

Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis.

Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis.

C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness.

Miscellaneous reactions: Drug fever, chills, and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L. E. phenomenon have occurred.

The sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents. Rats appear to be especially susceptible to the goitrogenic effects of sulfonamides, and long-term administration has produced thyroid malignancies in the species.

Dosage and Administration: Not recommended for use in children under 12 years of age.

The usual adult dosage is two tablets every 12 hours for 10 to 14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

How Supplied: Tablets, containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10. Imprint on tablets: ROCHE 50.

Reproduction Studies: In rats, doses of 533 mg/kg sulfamethoxazole or 200 mg/kg trimethoprim produced teratological effects manifested mainly as cleft palates. The highest dose which did not cause cleft palates in rats was 512 mg/kg sulfamethoxazole or 192 mg/kg trimethoprim when administered separately. In two studies in rats, no teratology was observed when 512 mg/kg of sulfamethoxazole was used in combination with 128 mg/kg of trimethoprim. However, in one study, cleft palates were observed in one litter out of 9 when 355 mg/kg of sulfamethoxazole was used in combination with 88 mg/kg of trimethoprim.

In rabbits, trimethoprim administered by intubation from days 8 to 16 of pregnancy at dosages up to 500 mg/kg resulted in higher incidences of dead and resorbed fetuses, particularly at 500 mg/kg. However, there were no significant drug-related teratological effects.

BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

President's Page

DR. CAMP

Reflections On The New York Meeting

Your President was greatly impressed with the reference committee work which was done at the recent AMA meeting. There were literally hundreds of items presented to these reference committees, which they handled with great knowledge and dispatch. This saved the House of Delegates an almost impossible task by reducing these down to very brief and concise form, which the House of Delegates could handle in short order.

Your own Medical Association in Alabama inaugurated a program of reference committees during the past year. I hope that this program will be a permanent part of our Alabama Society meetings from now on. I think our reference committees did a very fine job last year. I would urge all of you who have something on your mind that you would like to place on the agenda to be heard by a reference committee, to come forward during our next meeting. I would suggest that you have your problem in writing in order to facilitate the work of the reference committees.

Among the many hundreds of items, which were handled by the reference committees in New York, one might be of interest to all of us. Your President recently had occasion to contact Social Security as to the amount of compensation he might receive for retirement, which is very close. I received after three or four weeks a very nice letter stating that I would be entitled to $175 a month. I was greatly disappointed at the figure because I had thought that when one paid the maximum over a period of years, that he certainly would be entitled to maximum benefits. But it seems that this is not the case, when physicians' payments are being calculated. As many of you remember, physicians came under Social Security in 1965, but in computing the payment it seems that the people in Social Security go back to 1950 in their computations. This means that we get credit of 15 years of zero contribution, which cuts down our Social Security payments from a maximum by a fair amount.

A resolution was passed during the meeting of the AMA and submitted to the Board of Trustees for implementation to try to get this inequity corrected. We all hope that the Board of Trustees will be able to straighten this matter out.

As you may recall in one of my previous pages, I remarked that a great deal of discussion was had in regard to the PSRO Program. At least part of the guidelines have now reached the state level. We hope that in the next few weeks to be able to inform the membership as to the shape of the Alabama PSRO Program. Your President certainly hopes that we may have a meeting of the minds in regard to the number and the details of implementation, which will be worked out. I think it would be highly desirable if the physicians and hospitals could

(Continued on Page 150)

EMPLOYERS INSURANCE OF WAUSAU EMPLOYERS INSURANCE OF WAUSAU EMPLOYERS INSURANCE OF WAUSAU

Where will your malpractice insurance carrier be in 2000 A.D.?...

Yes, Doctor, you or your estate can be sued for malpractice up to 20 or 25 years from the time of the alleged event. Where will your malpractice insurance carrier by then? Well, when you're covered under your MASA sponsored malpractice insurance program, you can count on the reliability of a billion-dollar insurance company . . . Employers Insurance of Wausau. And financial strength and stability is just one of the ways you benefit yourself — and the entire Alabama medical community — when you subscribe to this coverage. For information on additional benefits, contact **MASA Insurance Department, 19 South Jackson Street, Montgomery, Alabama 36104, Or call (800) 392-5668 toll free.**

EMPLOYERS INSURANCE OF WAUSAU EMPLOYERS INSURANCE OF WAUSAU

The Woman's Auxiliary

President, Mrs. Robert W. Grady
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First Vice-President, Mrs. J. E. Dunn, Jr.
Northwest District Vice-President, Mrs. Charles Howell
Northeast District Vice-President, Mrs. Lucian Newman, Jr.
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Southeast District Vice-President, Mrs. Robert Foy
WAMASA Editor, Mrs. William L. Smith

AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

WAMASA A Winner At National Convention

Stars fell on Alabama at the Woman's Auxiliary to the American Medical Association in New York City in June, 1973. Alabama received a certificate of Achievement for an increase in membership for the year 1972-73. The Southern Region was again in the lead over the Eastern, Western, and North Central Regions, with 25,502 members. Let's keep up the good work and look for other physicians' wives to join us. Our goal is clear—to aid the medical profession in its objectives and work for improvement in the quality of life through better health care for every American.

At the annual luncheon honoring officers and trustees of the American Medical Association, awards were given to auxiliaries whose contributions to the AMA Education and Research Foundation had been outstanding. Special Merit Awards were given to the Woman's Auxiliary to the Medical Association of the State of Alabama-24.06 per capita. Mrs. Howard Johnson has again done a splendid job with her boutique and watch sales. It would be well for all of us to follow the example set by Camille Johnson. For example, Camille traveled over 11,000 miles last year selling placemats, stationery, candles, tool kits, watches and the new AMA-ERF scarves to raise money for AMA-ERF.

The Woman's Auxiliary to the Jefferson-Birmingham County Medical Society is the winner for the greatest amount contributed in the membership category of 351 to 500 with a grand total of $17,611.75 for AMA-ERF.

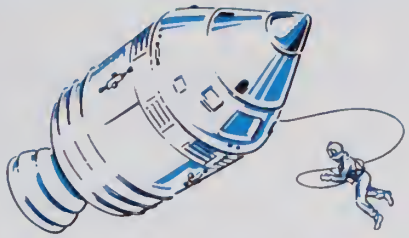
MRS. GRADY

I was very proud to be your presidential delegate at this Annual Convention.

Betty Grady

Betty Grady, President

Wisdom is knowing what to do next. Skill is knowing how to do it. Virtue is getting it done.



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

IN ASTHMA
IN EMPHYSEMA

optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

States Continue To Turn Thumbs Down On Pro-Substitution Legislation

Another year at the state legislative level, in most states, has gone down in history.

During this year only one state adopted some version of pro-substitution legislation in some way restrictive, at least in intent, of the physician's control of the therapy of his patient, namely, New Hampshire. Here, because of a saving amendment to the proposal, there is apparently no legal compulsion on the physician to change his prescribing practices.

Pro-substitution legislative proposals, restrictive in intent or practice, surfaced, in some form or another, in nearly half the states.

Three states, Massachusetts, Maryland and Kentucky have, over the past few years, passed pro-substitution legislation designed to be restrictive upon the physician's control of therapy, regardless of whether the restriction is overt or covert.

Massachusetts has adopted a state formulary designed to promote the use of cheaper drug products and restrictive, in intent, of the physician's control of the therapy of his patient. Because no penalties were incorporated in the law, physicians have seemingly not at all modified their therapeutic habits, and quite properly so. Thus the state went to considerable taxpayer expense without any lowering of cost of drugs, as promised to the consumer, to support a formulary committee, the development and publication of a formulary, etc. While there was some pressure this past legislative session to amend the law to force further restrictions on the physician, the legislature apparently had wits enough to leave a bad matter rest.

In Maryland, with such a law on the books for over two years, amendments were passed some time ago substantially weakening the restrictive character of the original law. These are largely unpalatable to the pharmacist proponents of substitution since they strengthen the physician's control of therapy. A formulary comprising a little over a dozen drug products has just issued from the State Department of Health. Rather than backing up this formulary with substantial published data proving therapeutic equivalence in man of the similar products listed, the Formulary Commission relied on the proven weak reed of FDA certification (which does *not* involve clinical proof of equivalence, but only chemical and physical data which show equivalence) as evidence of therapeutic equivalency.

In Kentucky, as yet, no formulary has issued, but the best indications are that Kentucky is following the Maryland tactic almost in toto.

So, in effect, since the American Pharmaceutical Association call to arms in 1969 to repeal the state anti-substitution laws, the balance sheet appears as follows:

1. Two states, Missouri and Alaska, which had *no* state anti-substitution laws and/or regulations in 1969, have adopted them!

2. No states have repealed their anti-substitution laws and/or regulations.

3. Four states, Massachusetts, Maryland, Kentucky and New Hampshire have adopted some version of pro-substitution legislation *weakening* their anti-substitution laws and regulations on the surface. Actually, little except expense to these states has occurred in their efforts to promote the interchange of cheaper drug products at the option of the pharmacist. In short, one of the major promises of proponents of substitution, cheaper drug products, has not been brought about anywhere as yet.

With the foregoing in mind, we should recall that organized medicine still stands four square on the platform that the physician should and must control the therapy of his patient, that the cooperating pharmacist at any level is a most helpful and cooperative source of drug information most readily consulted and that, all things considered, especially the best interests of their patients, restrictions of *any* sort on the physician's therapeutic control cannot and must not be tolerated. While organized pharmacy is widely split on this matter and the extremists would take over *all* drug therapy, it appears that over half the pharmacy associations and over half the pharmacist community do *not* want to take over any therapeutic responsibilities the physician does not ask them to do.

Unfortunately, however, increasing numbers of 'consumer advocates', purportedly representing consumers' organizations, have been misinformed about this matter to the point where they have become moving forces to restrict the physician's control of therapy by tampering with the state anti-substitution laws and/or regulations. They do this in apparent ignorance that the state anti-substitution laws and regulations are and have been consumer protective in their intent, scope, interpretation and application from their inception. Overall, they have worked well and both professions have been happy with them. Neither do they understand, seemingly, that the physician has all the authority needful, as things now stand, to delegate to a pharmacist whom he knows and in whom he has confidence, as much control of his patient's therapy as he considers in the best interests of that patient—and frequently does so.

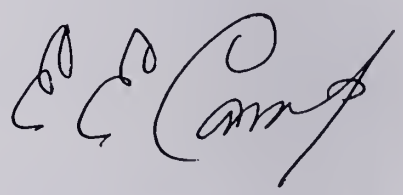
Under such circumstances one cannot help but suspect self-serving and self-seeking factors influence the most active and vocal proponents of restrictions on the physician's control of the therapy of his patients. This is the more so since any reasons so far advanced become insubstantial when viewed in the light of the weight of published scientific and medical data.

PRESIDENT'S PAGE . . .

(Continued from Page 144)

join wholeheartedly in this PSRO Program. As I stated before, I feel that we have our backs to the wall and it certainly behooves us to do our very best to insure that the PSRO Program does work. You will be informed at the earliest possible moment as to the nature and other information regarding the PSRO Program.

Sincerely,



E. E. Camp, M. D.
President

Many of us would be pleased to pay as we go, if we could only catch up paying off where we've been.

Doing little things better

caring better for his basic needs, less confused in his thinking; no great accomplishment for most people, but a significant advance for the patient with cerebral arteriosclerosis*

Now Available for Alabama Medicaid-Patients

Hydergine®

SUBLINGUAL TABLETS containing 0.167 mg. dihydroergocornine methanesulfonate, 0.167 mg. dihydroergocristine methanesulfonate, and 0.167 mg. dihydroergokryptine methanesulfonate

helps patients with cerebral arteriosclerosis do little things better

The usual dosage is four to six sublingual tablets daily. The patient's improvement with Hydergine is usually demonstrated in four to six weeks. Some nasal stuffiness due to adrenergic blockade, transient nausea or gastric disturbances have been reported with high dosages.

***Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indication as follows:

"Possibly" effective: The treatment of cerebral arteriosclerosis and dizziness, mood changes, nocturnal cramps, and paresthesias in the aged.

Final classification of the less-than-effective indications requires further investigation.

72-438R

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ

BOOK REVIEWS

THE FIRST FIVE YEARS: A Relaxed Approach to Child Care by Virginia E. Pomeranz, M. D. with Dodi Schultz sets the tone and sounds the theme of this totally new guide to the care of infants and preschoolers—a compendium of common-sense advice that is humane, eminently practical, often humorous, and reassuring for the young parent who may be, "at best confused, at worst trembling with self-doubt as a result of the proliferation of previously published pronouncements on the subject, many of them actually erroneous."

Dr. Pomeranz, a practicing pediatrician for more than two decades as well as a teaching physician associated with New York Hospital-Cornell Medical Center, debunks the outdated advice in short order—and goes on to offer understanding, workable hints to help make life easier and less worrisome for both parent and child. While never neglecting child health and safety, she points out, for example, that wrinkled clothes don't count (the introduction is subtitled "Who Says It Has to Be Ironed?"); that bottles normally needn't be sterilized ("I have yet to see a nursing mother boil her nipples"); that infants, except for certain special areas, require little cleansing ("Babies are not subject to body odor . . . . it will not harm your baby in the least if he or she is not bathed at all for the first six months of life."); that salesmen of built-up baby shoes are more interested in your money than in your child's feet ("sneakers are your best bet").

The Leukemia Society of America, Inc. has produced a new booklet designed to serve as a study aid for advanced students, nurses and paramedical personnel.

Different types of leukemia are defined in the opening chapter of the booklet, along with its nature and effects. A special section is devoted to diagnostic features with color plates illustrating changes that take place in the structure of the blood, bone marrow and lymph nodes as white cells "take over" to cause the illness. A summary gives a rundown of methods currently used in controlling the disease.

Copies of "Leukemia—The Nature of the Disease" may be had without cost from the Leukemia Society of America, Inc., National Headquarters, 211 East 43rd Street, New York, N. Y. 10017.

Planned Parenthood/World Population has published a new PATIENT SERVICES TRAINING MANUAL.

The manual is designed to serve as a single resource for all of the information essential to anyone working directly or indirectly in the area of family planning and can be adapted easily to the needs of agencies other than Planned Parenthood.

Chapters in the PATIENT SERVICES TRAINING MANUAL include:

Human Reproductive Systems, Birth Control Methods, Psychological Aspects of Contraceptive Use, Guidelines for Birth Control Methods Class Leaders, The Pelvic Exam, The Clinic Interview, Clinic Information and Guide for Medical Aides, Teen Services, Pregnancy Counseling, Venereal Disease, Sterilization, Human Sexuality, Population Issues, and Referrals.

Abnormal Nerve Cells Linked To Mental Illness

Strong evidence that abnormalities of nerve cells are present in patients with severe mental illness is reported by University of Chicago investigators. They demonstrated abnormalities in nerves connecting skeletal muscle to the spinal cord in 16 of 24 psychotic patients. Changes comparable to those found might also be occurring in the brain and spinal cord and be related to the cause of psychosis itself, they said.

THERE'S MORE TO A PHONE SYSTEM THAN TELEPHONES.

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SIGHTS AND SOUNDS

A new 23-minute, 16mm color film entitled, *Pancuronium Bromide: Its Pharmacology and Clinical Use,* is now available.

The film was produced under the supervision of Francis F. Foldes, M. D., Departments of Anesthesiology, Montefiore Hospital and Medical Center, and The Albert Einstein College of Medicine, New York.

The following synopsis was prepared by the producer:

> "In the opening sequence, Dr. Foldes discusses the chemistry, pharmacology and methods of administering the drug. Then, moving to an operating room, he demonstrates how it may be administered with an inhalation agent (Halothane), neuroleptics and balanced anesthesia. Reversal of the effects of pancuronium bromide is also demonstrated."

There is also a word by word transcript or sound cassette available for distribution to an audience. For further information including orders, contact:

Association-Sterling Films
866 Third Avenue
New York, New York 10022

Another film available at this time deals with emergency care for those involved in the drug scene. The film is entitled, *The Treatment of Acute Drug Overdose,* and is intended for viewing by medical personnel who have first contact with persons requiring emergency care for drug overdose.

It was produced at the Haight-Ashbury Free Medical Clinic in San Francisco, and depicts emergency treatment including maintaining airway respiration, cardiovascular support and the use of certain pharmacologic agents. It is available for purchase as well as rental and inquiries including loan requests, should be made to:

Eli Lilly & Company
Film Library
Indianapolis, Indiana 46206

Loan requests should include first, second, and third choices for showing dates.

Merck Sharp & Dohme recently announced the availability of their newest educational program, a twenty-four minute 16 mm color film entitled, "Uncovering Depression in the Anxious Patient—Interviewing Techniques for Diagnosis."

The film was designed for physicians who do not specialize in psychiatry, and was developed to provide timely and relevant information on the subject of interviewing and diagnosing patients with anxiety and depression.

Dr. Allen J. Enelow, Chairman of the Department of Psychiatry, Pacific Medical Center, San Francisco, supervised the development of the film. Dr. Enelow has been a leader in the area of developing films employing psycho-drama as an effective and innovative teaching technique.

To arrange a showing of the film contact: Ralph E. Snyder, M. D., Director of Professional Relations, Merck Sharp & Dohme, West Point, Pennsylvania 19486.

Eaton Laboratories has initiated a unique set of pathology slides. The 106 35 mm slides were developed with the cooperation of Dr. A. D. Nicastri and Dr. E. A. Friedman of Downstate Medical Center, Brooklyn, New York. They illustrate thirty cases of various kidney diseases, and are accompanied by a printed syllabus describing each slide and giving the case history.

This series is available to physicians on a free loan basis and can be scheduled through an Eaton medical sales representative or by writing Eaton Medical Slide Library, Eaton Laboratories, 17 Eaton Avenue, Norwich, New York 13815.

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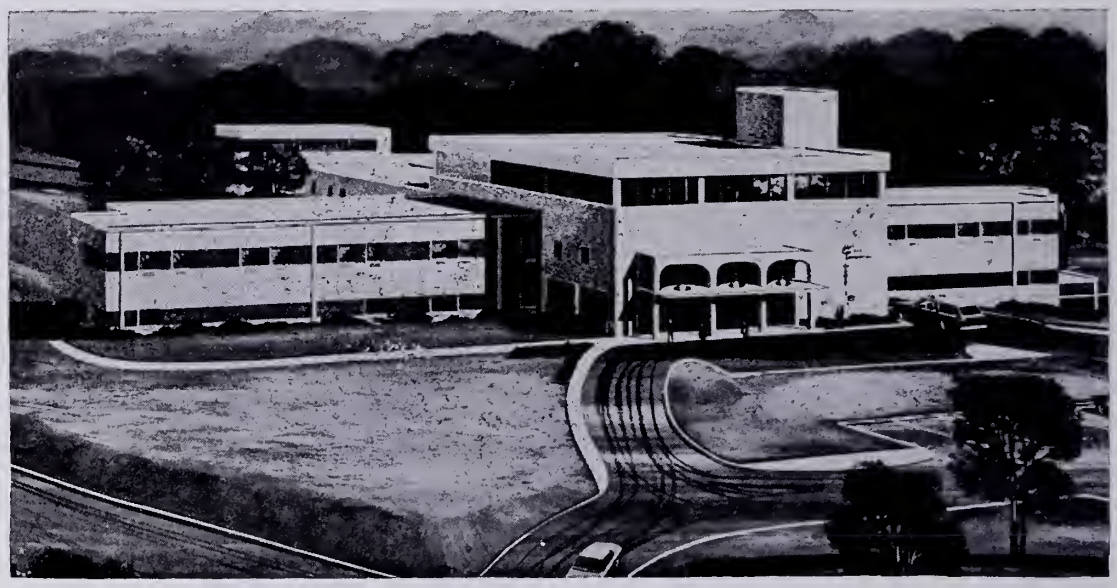

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Heart Muscle Regeneration?

A University of Chicago research team is studying the possibility that damaged heart muscle cells can restore itself instead of producing scar tissue.

Their studies indicate that apparently after the first four weeks of birth the heart muscle cells are incapable of cell division and DNA synthesis.

Drs. Murray Rabinowitz and Donald Fischman along with Prof. Radovan Zak, conducted their experiments using pigs, monkeys, rats and mice.

The first project involved animals who were exposed to low oxygen atmosphere to demonstrate that mitochondria, essential to the production of energy for muscle functions, are destroyed. The goal is to obtain information about how these repair processes are controlled in order to minimize cell death and to obtain optimal return of function.

Another project presently under way involves the effects of Lysosomes (an enzyme) and their effects on cardiac muscle cells. The possibility that these enzymes may lead to additional intra-cellular damage in infarcted pigs and monkeys is being examined.

The researchers are also studying the advantages of prolonged exercises. They had animals "conditioned" on a treadmill and evaluated, by stressing the hearts with other procedures, the effects of overworking the heart. The results of oxygen starvation was combined with the exercise as part of the investigation.

Fischman, Zak, in collaboration with Dr. Rabinowitz, are studying why cardiac muscle cell division, in adults, restricts itself. It is of great importance to determine if adult heart muscle cells can be made to reinitiate cell division and to regenerate. In this way, dead muscle can possibly be replaced by normal muscle rather than scar tissue. An intensive study of the development of cardiac muscle cells at varying ages—embryo, young, and adult—in tissue cultures, is under way.

According to the National Society for Medical Research, continuing progress in the battle against heart attacks and related cardiac disease depends on new information obtained thru animal experimentation.

Aerosol TB Vaccine May Be More Effective

There is an ever-increasing amount of research being conducted which indicates that an aerosol tuberculosis vaccine is more effective than the usual method of vaccination under the skin.

A group of scientists at Hazleton Laboratories in Falls Church, Va. and the Tuberculosis Panel of The U. S.-Japan Cooperative Medical Science Program has added a strong piece of evidence to the argument for such a vaccine.

The research team vaccinated Rhesus monkeys with TB vaccine called BCG (Bacillus Calmette-Guerin) three ways: in an aerosol, intravenously and intradermally. Another group received no vaccine. Eight weeks later the animals were challenged with small doses of a virulent tuberculosis bacteria in an aerosol.

Monkeys vaccinated by the aerosol and intravenous methods showed fewer signs of disease than those receiving the vaccine under the skin or those who received no vaccine.

The two most obvious advantages for the aerosol are simplicity of administration and a higher degree of effectiveness. Intravenous vaccination is as effective as the aerosol, but it is impractical for mass vaccinations in humans.

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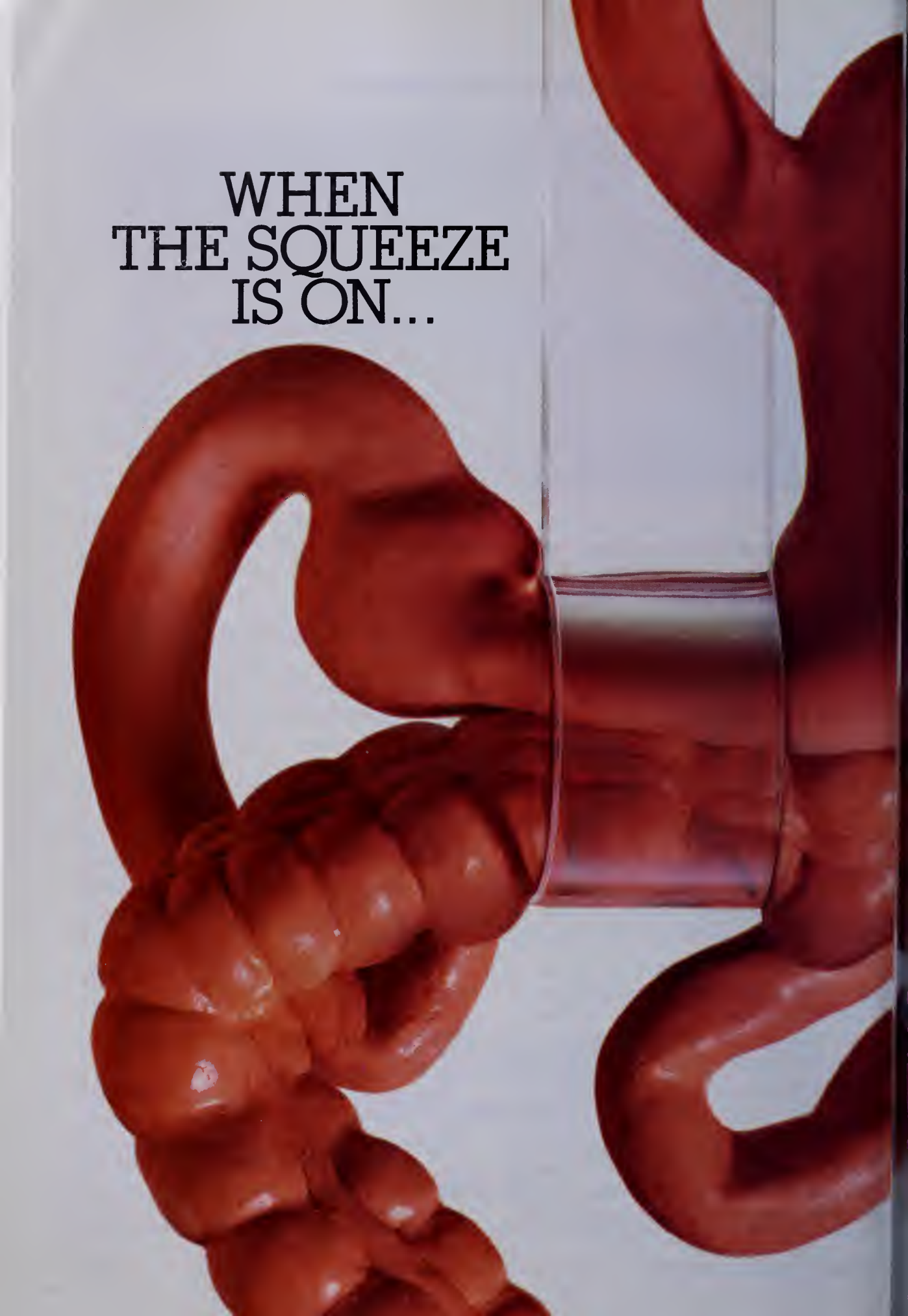

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1973 Freshman Class At UAB

Medical education's concerns—women, minority group members and non-urban students—are adequately reflected in the incoming freshman class at the School of Medicine at the University of Alabama-Birmingham (UAB).

In the 1973 freshman medical school class which numbers 125, 22 of the students are women. National statistics show there has been an increase in highly qualified women turning toward health careers in the field of medicine, as evidenced by this UAB class.

Ten of the freshmen are black students, two of them female, making a total of four black women now matriculated at the UAB medical school. Twenty-eight students from this minority group have now enrolled at the UAB school.

All but three freshmen are residents of Alabama and the percentage from non-urban areas represents more than half the class.

Twenty-five of the students come from towns with a population of 5,000 or less; 32 from cities 5,000 to 25,000; 11 from cities 25,000 to 50,000 and three from cities 50,000 to 100,000. Students from urban areas of 100,000 or more population number 54.

"As a state-supported institution, we try to keep as many qualified, medically oriented young people in Alabama as possible. We hope to identify students whose impressive academic records and whose personal qualities indicate the potential for success in the study of medicine," said Dr. Henry H. Hoffman, director of admissions at the UAB medical school and professor of anatomy. "We do, however, encourage those students who do not gain admission to medical school not to abandon the health field, but to examine alternative health career areas.

"We are identifying minority students on state college and university campuses as early as the sophomore year, and present UAB medical students are also helpful in locating potential minority medical students," Dr. Hoffman said.

Dr. Hoffman pointed out that decreased availability of student support in the financial area has made it necessary that the individual student make every possible effort of assuming his personal financial responsibility.

Minimum annual cost to the single medical student at UAB is nearly $5,000. A married student with no dependents should plan for an expense of $6,000 or more.

Artificial Skeletal Muscles

Animal studies conducted by scientists in Columbus, Ohio indicate that artificial skeletal muscles for humans are a very real possibility for the future of medicine.

Battelle Memorial Institute researchers have successfully implanted a prosthetic muscle made of dacron and silicone rubber, in the rear legs of sheep. Jerry D. Helmer and Kenneth E. Hughes developed the "muscle" and the procedure used in replacing the anterior tibial muscles of their animals. Within four weeks following surgery, the two sheep receiving the implants were walking and running almost normally.

Such prosthetic muscles may eventually prove helpful to stroke patients who have been left with a muscular impairment. Further development of such devices could also prove to be of benefit to victims of scoliosis (abnormal spine curvature) or other afflictions caused by a lack of healthy skeletal muscle.

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You get a comprehensive medical library to help you do your research. An editing service for your articles. Information and reports on medical and health subjects from any AMA department.

You get publications to keep you abreast of medical and health developments. *JAMA. American Medical News.* And *Prism,* the new socioeconomic journal.

You get the Physician's Placement Service to help you find a place to practice or locate an associate. And if you're a resident winding up your training, there's a special workshop to help prepare you for setting up your practice.

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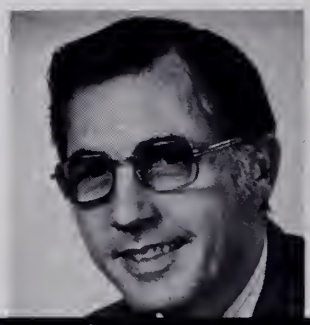
Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American Pharmaceutical Association



"Too many doctors are indifi ent to the economic consequence their decisions." So stated a recer issue of *Medical News Report* (De cember 4, 1972), an independent weekly newsletter published by fo AMA Chief Executive F. J. L. Blasi game, M.D.

Doctor, are you indifferent...?

In discussing an anticipated crease in Blue Shield rates, Dr. Bl ingame's newsletter had this to sa

"In general, it can be said, M have given the impression they ar not particularly concerned with th increase in cost of health care to t patients...

"True, an MD's training is pr marily scientific, but in the real w of practice, all of his scientific de sions have a price tag, or an econ impact. The economics of health beckon the practitioner's attentio Concern for economics of medici

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical Manufacturers Association

When the pharmacist recom mends that a drug product other the one ordered be dispensed, th prescriber invariably permits the change when he feels the best int ests of the patient will be served.

Shortcomings of Pro-Substitution Argument

The fact remains that it is ne sary for the prescriber to know th the change is being contemplate and to be in a position to consent demur. Without that opportunity, unilateral decision of the pharma made in the absence of clinical kn edge of the patient, could expose to needless risks, and in addition, jeopardize the relationship betwe the professions of Pharmacy and Medicine. In my view, there is not in the pro-substitution argument offsets these risks.

The Issue of Drug Knowledge

Substitution advocates clair that the primary justification for changing the rules is the desire t better utilize pharmacists' knowl about drugs. Yet the pharmacist' task to keep current on the entire field of drug therapy, to some de puts him at a disadvantage. Most often, a practicing physician will expert knowledge of no more tha

Advertisement

ould be an obligation of medical actice...

"Medical societies ought to con- ct continuing campaigns to point t the substantial savings that could realized thru deductible insurance d protection for catastrophic ill- ss. At the very least, they should, in e patients' interest, question the tics of any insurance organization at raises health care costs by forc- policyholders to buy insurance y may not need or want and prob- ly won't ever use.

"Too many doctors are indiffer- t to the economic consequences of ir decisions. Too many, for ex- ple, habitually hospitalize patients the convenience of the MD. It's nsense to deny such habits exist...

"Doctors, thru their medical so- ties, have unhesitatingly appealed their patients for support in the ht against government interference h the private practice of medicine. d the public in the past has re- onded. It's time the American Med- l Association and state and local edical societies paid off the debt by cisive action to hold down the cost medical care."

st of Drugs

Insurance rates and hospital arges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

---

30 drugs that he selects to treat the ajority of conditions encountered in practice. Moreover, the physi- n's choice of a specific brand is sed on his knowledge of the pa- nt's medical history and current ndition, and his experiences with e particular manufacturer's oduct.

Some substitution proponents ve argued that the dispensing of a escription is a simple two-party nsaction between the pharmacist d the patient, and that a substitut- pharmacist may avoid even a chnical breach of contract by simply tifying the patient that he is making e substitution. I would judge that w courts would be sympathetic ward a pharmacist who substituted thout physician approval and who dertook a legal defense that seeks make the patient responsible for e pharmacist's actions.

duced Prescription Prices?

Substitution advocates are ggesting to the consumer, and par- ularly the consumer activist, that duced prescription prices could low legalization of substitution. e have seen absolutely no evidence justify this claim. To the contrary, perience in Alberta, Canada, where bstitution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

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Determination Of Carcinoma Of The Cervix And Endometrium Using A Single Slide

A CASE REPORT

L. Clark Gravlee, Jr., M. D., FACOG
Gravlee-Wideman Clinic, P. A.
Birmingham, Alabama
and
Herman J. Lohmann, M. D.
Department of Pathology
Baptist Medical Center—Princeton
Birmingham, Alabama

Abstract

A case is reported in which the cellular material obtained from a vaginal lavage and an endometrial lavage with isotonic saline were combined and placed on a single slide. Pathologic differentiation was easily achieved and from this sampling a diagnosis of cervical carcinoma was made. It may be advantageous to consider combining cervical and endometrial samplings on the same slide.

It is customary to perform separate pathologic examinations of cervical and vaginal samplings and those from the Gravlee Jet Washer. A 25-year old white female was found upon routine gynecologic examination to have a 5 cm cyst on her left ovary. In addition, a Class III Pap test was discovered; otherwise, the examination was negative. Subsequently, the patient had a vaginal lavage and a jet washing performed. The following technique was employed.

The speculum was placed in the vagina and the cervix and upper vagina were irrigated with 15 cc of normal saline using a 24 cc syringe and a hysterosalpingogram cannula. Following this procedure, a Gravlee jet washing of the endocervix and endometrium was performed in the normal manner. The two washings were then mixed and a sample placed on a single slide and examined by Dr. Lohmann.

The cellular characteristics of the cervix and endometrium were clearly differentiated on the slide. The patient had a carcinoma in situ of the cervix and benign endometrial cells. The diagnosis was confirmed by a subsequent D & C and cone biopsy. The ovarian cyst was later found to be a benign teratoma.

It is suggested from this case report that the single slide method can be used to either detect cervical carcinoma and endometrial carcinoma with the possible reduction of laboratory costs. We would encourage other investigators to attempt this procedure.

The S. In P. S. R. O. Stands For Surrender

Robert H. Rhyne, Jr., M. D.

Moulton, Alabama

Editor's Note: The following article represents one facet of opinion on PSRO's. Opposing viewpoints will be welcomed.

A fantastic trap has just been placed in your path! It is so unique that it can catch physicians, patients, and politicians. For sure, it will trap patients, and politicians are afraid it will catch them too. The only way the politician can be spared is for him to lure the physician in as a substitute.

As the physician approaches the trap he is told that he can enter voluntarily or stay out and regret it. Of course, every trap has to have bait and this one is no exception. The smart politician has inscribed a sign over the entrance that appeals to the physician's ego: enter and you will be taught to be a better physician, you will learn a lot. The real lesson is inscribed inside over the exit.

Perhaps you are wondering if the Professional Standards Review Organization (P. S. R. O.) can really be compared to a trap. Well, you are about to get a sneak preview of the new play *P. S. R. O. Spells Back-Fire.* It is being shown in your local urban renewal theater. I am sure you have heard about it. The play has been getting advance billing by prominent men in the Congress and even by some outstanding AMA members.

Let's visit the theater and see what we can learn about the production.

I am also anxious to figure out how the historians are going to review it: as a comedy or a tragedy? The posters outside are interesting reading. For instance: Producer—U. S. Congress, Associate Producer—Senator Wallace F. Bennett, Director—Department of Health, Education and Welfare (H. E. W.), Associate Director—William I. Bauer, M. D., Orchestration—Secretary Casper Weinberger. The Cast is made up of politicians, patients, and your peers.

Now let's go inside the theater. It is obvious at once that the stage was built by our Senators. This stage is really first-class. It was built not according to what would be practical but according to what should be had.

The seating arrangement is typical. The patients get to sit in the middle section, the politicians are in the left section and physicians are seated to the right.

You have never had such an opportunity to review a play as you are about to receive. Not only will you get to see yourself in it but you will visit each seating section to hear comments made while the play is taking place. The story is told in three Acts. Each Act has two scenes. Scene I is with your peers (and you) playing a leading role with patients. Scene II is with no physicians in lead roles—only political appointees and patients.

Secretary Weinberger is striking up the band. That means its time for us to move to a seat. During this first Act let's sit in the section with the Congressmen and listen to their remarks.

Act I, Scene I

(Patient is lambasting a physician because he cannot admit her without taking her symptoms before some committee.)

1st politician:—"It surely was shrewd of ol' John to trick this doctor into playing that role. I could never get re-elected if I had to play that part."

2nd Politician:—"We have certainly been lucky. You know when Medicare was first being talked about, the AMA said it was going to cost more than we were estimating.

Well, we passed a law the same year that Medicare took effect to include hospital employees in the new minimum wage requirements for the first time. Of course, this ran up cost in hospitals and doctor's offices surprisingly high. No one mentioned the minimum wage as an excuse so we blamed the hospitals and the doctors for high cost of the Medicare program. That way we got the retirement age vote and the hospital employee vote and only lost the doctor and hospital administrator vote. There were not enough of them to matter anyway. Now, son, you can learn something from those maneuvers! That's real politics at its professional best!"

1st politician:—"Looks like we are going to luck out again. That original Medicare law was intended to save lives and prevent suffering but it cost a lot of money. We got the credit and the doctors and hospitals got the blame for charging too much. The design of this P. S. R. O. act will create inconvenience and mental anguish but will save a lot of money. We have got the doctor in a position to take the blame for the bad part. All this money we are going to save on Medicare and Medicaid expenses will come in handy for new programs and more votes for us."

Act I, Scene II

(An elderly couple are writing their Congressman to complain about one of his appointments to the local P. S. R. O. Committee. The patient had a stroke but was forced to leave the hospital before his physical therapy was completed. Now the couple can not afford the cost of transportation back and forth to the hospital for daily P. T.)

1st Politician:—"Who talked me into voting for this —— ——— P. S. R. O. thing in the first place. If all the people vote against me that have complained about those H. E. W. guide lines, I'll have to go back to practicing law."

2nd Politician:—"Not only that, but we are not saving any money for new vote-getting projects. Do you know how many millions of dollars we spent in the initial six months of this P. S. R. O. business for administrative purposes? There was an employment agency for hiring physicians and groups, a month long orientation program for them to teach the P. S. R. O. guidelines, there was a one week course to acquaint the newly hired doctors with the government retirement program, sick leave, mileage, legal holidays, vacation time and the governmental chain of command so that they would know who to respond to when a request for a special favor for a special patient was handed down. These guys are being paid like military doctors and that's almost as much as we make!"

"When you add on the costs of area and regional directors and deputy directors the cost is outrageous. Not only that, the orientation and indoctrination programs were late getting started."

1st politician: —"The legitimate cost is bad enough but have you noticed how Senator Sam L. is using his "hospital privileges." He will get anyone from his district admitted or their discharge delayed without hesitation. He is sure to get re-elected but there isn't a doctor around who could over-utilize the hospital any more than he does. I guess next we shall be having a peer review for congressmen. We have had cost overrides in contracts for planes and ships but that was for equipment to protect our country. We can't afford to have any cost overrides in health care."

Act 11, Scene I

(A physician is explaining to a patient that according to his book of guidelines she has stayed in the hospital as long as a person her age and sex can stay with a diagnosis of congestive heart failure plus diabetes mellitus with acute pyelonephritis. The patient is sobbing as best she can—with mod-

erate shortness of breath. The physician exhibits great remorse.)

1st Patient:—"Now who does that doctor think he is? That poor lady paid her social security taxes for years and her children are still paying! She is entitled to stay there until her health is better restored. I'll just write to my Congressman."

2nd Patient:—"It's no use. I did that. He just wrote back and said that the doctors were running the hospital program according to some guidelines and there was nothing he could do about it. The senator said if I thought my doctor was too unreasonable, perhaps I should report him to his county medical society. But you know how those doctors stick together. It wouldn't do any good."

1st Patient:—"I'll be glad when socialized medicine gets here. Then we can get the care we need—and it'll serve those doctors right."

Act II, Scene II

(A patient is being informed that he must be discharged from the hospital. His doctor is not following the usual and customary outline of diagnostic procedures as described in the H. E. W. manual. The politically-appointed member of the P. S. R. O. committee authoritatively lets the patient know that his doctor must learn his lesson.)

1st Patient:—"Why in this world did Senator John D. ever stoop to putting that obnoxious so-and-so on such an important committee?"

2nd Patient:—"Haven't you heard? He has a lot of influence with his labor union and he worked hard to get the Senator elected last year."

1st Patient:—"Well, I'm going to work against the good Senator if he doesn't improve the situation at our hospital. In fact, I'm going to send him a letter to that affect."

2nd Patient:—"At least this is a better arrangement than it was when the doctors ran these committees. Now we can retaliate with our votes. Before, there was nothing you could do but feel oppressed."

1st Patient:—"Now, I can see why President Nixon vetoed the last Hill-Burton extension. He knew that this P. S. R. O. thing was going to empty a lot of beds."

Act III, Scene I

(A physician is informing his peer that he is not following the routine laid down by H. E. W. for the management of a certain patient.)

1st Physician:—"How can Bill expect anyone who is the least bit malpractice-conscious to follow such a routine? There was a good review of this subject in our State Journal last month and according to it, this H. E. W. material is a good year behind. Talk about stifling the advancement of medicine!"

2nd Physician:—"Jack is the one I feel sorry for. He didn't want us to get active in this mess anyway and now he has to tell his patient that she will have to be discharged. Her treatment was not 'according to the book.'" Although it was the latest according to the journals, it was inappropriate utilization of a hospital bed according to the H. E. W. manual.

1st Physician:—"There was all of this talk earlier about what a good teaching experience this P. S. R. O. would bring to us. Personally, I wonder how the government knows so much about teaching physicians. I always thought the elements of pride, competition and the desire to improve were better stimulants to learn than was the necessity to keep up with a government manual."

2nd Physician:—"It is a good thing Jack doesn't realize why things at his hospital have gotten tougher. H. E. W. has just advised them that by reviewing their P. S. R. O. activity it has become obvious that there is a 'pattern of leniency' in their reports."

1st Physician:—"It seems that the members of the P. S. R. O. committee get just enough rope to feel like they are running the show but when H. E. W. pulls out the slack, it is easy to see that they are just puppets. The puppets are the only ones out front to get hit by the eggs and tomatoes. The way this plot unfolds, there surely will not be a raining of coins upon the stage. With the new increase in minimum wage, hospital costs are going higher. Tightening of controls on hospital spending will get worse."

Act III, Scene II

(A Congressman and a Representative of H. E. W. are having a fierce fight about a member of a local P. S. R. O. committee. It seems that this member is costing the Congressman too many votes.)

1st Physician:—"All of my previous thinking has been geared to helping the patient. The circumstances seem more natural now. In Scene I, the patient was moved up stage or down stage as was needed to save the politician's money. The physician was made to feel that he was guardian of the politician's pocketbook. He was also made to feel guilty if he 'wasted' money trying to give first class care."

2nd Physician:—"I find it far more comfortable to strive for a desired level of health my way than to make apologies for not achieving a cure within a rationed period of time according to the way H. E. W. thought it should be done."

1st Physician:—"At least we shall not have to worry about socialized medicine being cast upon us by the present Congress. They have the attitude that we shall receive only an allotted amount of care and only when they agree to the time. You think of socialized medicine as being all the care you need, anytime you need it."

2nd Physician:—"In Scene I, if you fail to accomplish a desired result in a specified time, the patient felt deprived of his share of hospital time and, of course felt ill toward physicians. In Scene II the physician may not be able to maneuver the patient into a longer hospital stay any better than in the previous scene but at least he can help the patient to see that it's the 'efficient' government regulators and their local politicians who are saying 'you can not have any more treatment here'."

Review

Who can see the future better—the politician or the physician?

The art of being a good politician rests in the ability to foresee how the public will accept a program or event. You are classed as a master physician when you can predict the course and outcome of a disease. The politician thinks in terms of a population. The physician thinks in terms of a patient. The politician thinks in terms of a group predictability but we physicians think in terms of individual variation. Perhaps this is why Senator Bennett keeps threatening us with who he will hire if we do not take charge of the P. S. R. O. activity. He can see the population is not going to like it and he does not want Congress to take the blame.

When the P. S. R. O. bill was first introduced in Congress, there was a clause in it that said physicians would be fined up to several thousand dollars if they were found guilty of abusing hospital privileges. Fortunately, the AMA got that removed from the bill. While we were fighting to keep a clause out, the remainder of the bill marched through Congress.

While we are preoccupied with state-wide P. S. R. O. opportunity, the remainder of the program marches on. Wouldn't it be more to the patient's advantage if we were fighting to help write the standards of hospital care? Who do you suppose is busy right now polishing up our future standards to live by?

H. E. W. is using the "Brer Rabbit's briar patch" technique on us: you can have anything you want except a state-wide P. S. R. O. This keeps us real busy jumping up and down plus the fact that it makes us beg for what the Congressman wish we would have.

It would make their letter writing so simple. When a patient complains, the Congressman just says, "the doctors of your state are running that program—it's their fault—not mine."

If you are still wondering about the sign over the exit from the trap, it reads: "Don't let anyone use you against your patient."

From where the physician sits, is the P. S. R. O. play going to be a comedy? Are the patients' complaints going to make the politician squirm to the point that he will give the patient a little more hospital freedom or get voted out of office? Will the play be a tragedy for the physician by creating misunderstanding, hostility and retailiation from his patients and smiles from his Congressman?

It is fast becoming time to choose sides. Who are we going to try to help—the politician or the patient? You notice it is a matter of who we are going to help—not what are we going to change or create. We are too few in number at the ballot box. Our contributions to political campaigns and our work in political campaigns have been too limited. While we are waiting to build a stronger base in Congress, let's help someone who is already established there—our patients.

Let us not volunteer organized medicine to serve as H. E. W.'s hired gun to shoot down normally rising costs. We do not need to be the scapegoat for another Congressional maneuver.

Sure, it will make you feel insecure and uncomfortable for a while to have lay people try to judge your work. But, they will be going "by the book" and that is what your peers will have to do, too. Would it not be better to free your peer from police duty and let him use that time to study or to help you get the day's work done? If a patient is going to get mad about this program, I'd rather he get mad at his peer instead of mine.

We have always wanted to keep medicine out of politics but now that politics is in medicine, more than ever, what are we going to do. We might learn the new battle cry for the years ahead: "Your Congressman made me do it."

New Findings Reported On Cardiopulmonary Disease

New concepts on the pathophysiology and therapy of pulmonary edema are reported by investigators at the Stanford University School of Medicine.

One significant finding associated with this condition is the "capillary leak syndrome". In studying pulmonary edema fluid under conditions of altered capillary permeability they found that large molecules with molecular weights as high as 500,000 readily penetrated the alveolar-capillary barrier. This points up the importance of pulmonary edema related to altered pulmonary capillary permeability rather than cardiogenic decompensation.

It was also demonstrated for the first time that low levels of nitrous oxide, an atmospheric pollutant, produced biochemical damage in alveolar macrophages.

Another major finding was that a foreign enzyme, uricase, can be incorporated intact into alveolar macrophages resulting in a new biochemical function for the cell. This system has great potential as a model for studying regulatory biochemical mechanisms for therapeutic replacement of deficient regulatory macromolecules and for studies dealing with mechanisms by which environmental factors may produce genetic alterations. (Principal Investigator: John P. Bunker, M. D.)

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Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflux esophagitis, or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution.

Fever and possibly heat stroke may occur due to anhidrosis.

In theory a curare-like action may occur, with loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted.

Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthine.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

Pro-Banthine P.A.—Each tablet of Pro-Banthine P.A. (propantheline bromide) contains 30 mg. of the drug in the form of sustained-release or timed-release beads; on ingestion about half of the drug is released within an hour and the remainder continuously as earlier increments are metabolized. Thus the result is even, high-level anticholinergic activity maintained all day and all night in most patients with only two tablets daily. Some patients may require one tablet every eight hours.

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Placidyl®
(ETHCHLORVYNOL)

Brief Summary

Indications—Placidyl (ethchlorvynol) is indicated as short-term hypnotic therapy in the management of insomnia.

Contraindications—Drug hypersensitivity and porphyria.

Warnings—Not recommended during the first and second trimester of pregnancy. Caution patients of possible combined exaggerated effects with alcohol, barbiturates, tranquilizers or other CNS depressants. Exaggerated effects might result in blurring of vision, paralysis of accommodation and profound hypnosis. Caution patients concerning driving a motor vehicle, operating machinery, or other hazardous operations requiring alertness after taking the drug. ADMINISTER WITH CAUTION TO PATIENTS WITH SUICIDAL TENDENCIES AND DO NOT PRESCRIBE LARGE QUANTITIES OF THE DRUG. Adjustment of the dosage of oral anticoagulants might be necessary when beginning ethchlorvynol therapy, during therapy, or after stopping therapy. This drug is not recommended for use in children. PLACIDYL HAS THE POTENTIAL FOR THE DEVELOPMENT OF PSYCHOLOGICAL AND PHYSICAL DEPENDENCE. INSTANCES OF SEVERE WITHDRAWAL SYMPTOMS, INCLUDING CONVULSIONS AND DELIRIUM CLINICALLY SIMILAR TO THOSE SEEN WITH BARBITURATES, HAVE BEEN REPORTED IN PATIENTS TAKING REGULAR DOSES AS LOW AS 1000 MG. PER DAY OVER A PERIOD OF TIME WHEN THE DRUG WAS SUDDENLY DISCONTINUED. PROLONGED ADMINISTRATION OF THE DRUG IS NOT RECOMMENDED. Addiction-prone patients or those who are likely to increase dosages of the drug on their own initiative should be observed for evidence of signs or symptoms which may indicate possible early withdrawal or abstinence symptoms. Signs and symptoms associated with withdrawal and abstinence include unusual anxiety, tremor, ataxia, slurring of speech, memory loss, perceptual distortions, irritability, agitation and delirium. Other less well defined signs and symptoms, not necessarily due to withdrawal and abstinence, may include anorexia, nausea or vomiting, weakness, dizziness, sweating, muscle twitching and weight loss. Abrupt discontinuance of Placidyl following prolonged overdosage may result in convulsions and delirium.

Precautions—Toxic amblyopia has been reported with long-term continuous use of ethchlorvynol. Permanent visual defects have been observed, although amblyopia has improved after discontinuation of the drug. Drug dosage should be limited for elderly and debilitated patients to the smallest effective amount. If pain is present, this drug should only be given if insomnia persists after pain is controlled with analgesics. Caution is advised in prescribing the drug for patients who are being treated with either MAO inhibitors or antidepressants. Transient delirium has been reported with the combination of Placidyl and amitryptyline. Drug dosage should be reduced if prescribed for patients receiving MAO inhibitors or antidepressants. Caution should be exercised in patients with impaired hepatic or renal function. Patients who respond unpredictably to barbiturates or alcohol, or who exhibit excitement and release of inhibition in association with such agents, may also react in this way to Placidyl. Rarely, patients may exhibit symptoms suggestive of an unusual susceptibility to the drug; such as prolonged hypnosis, profound muscular weakness, excitement, hysteria, or syncope without marked hypotension. Transient giddiness or ataxia may occur.

Adverse Reactions—Hypotension, nausea or vomiting, gastric upset, aftertaste, blurring of vision, dizziness, facial numbness, and allergic reaction typified by urticaria have been reported following Placidyl administration. Mild "hangover" and symptoms of mild excitation have occurred in some patients. There have been rare reports of cholestatic jaundice occurring in patients taking ethchlorvynol. A few cases of thrombocytopenia have been reported in patients receiving ethchlorvynol. 304431

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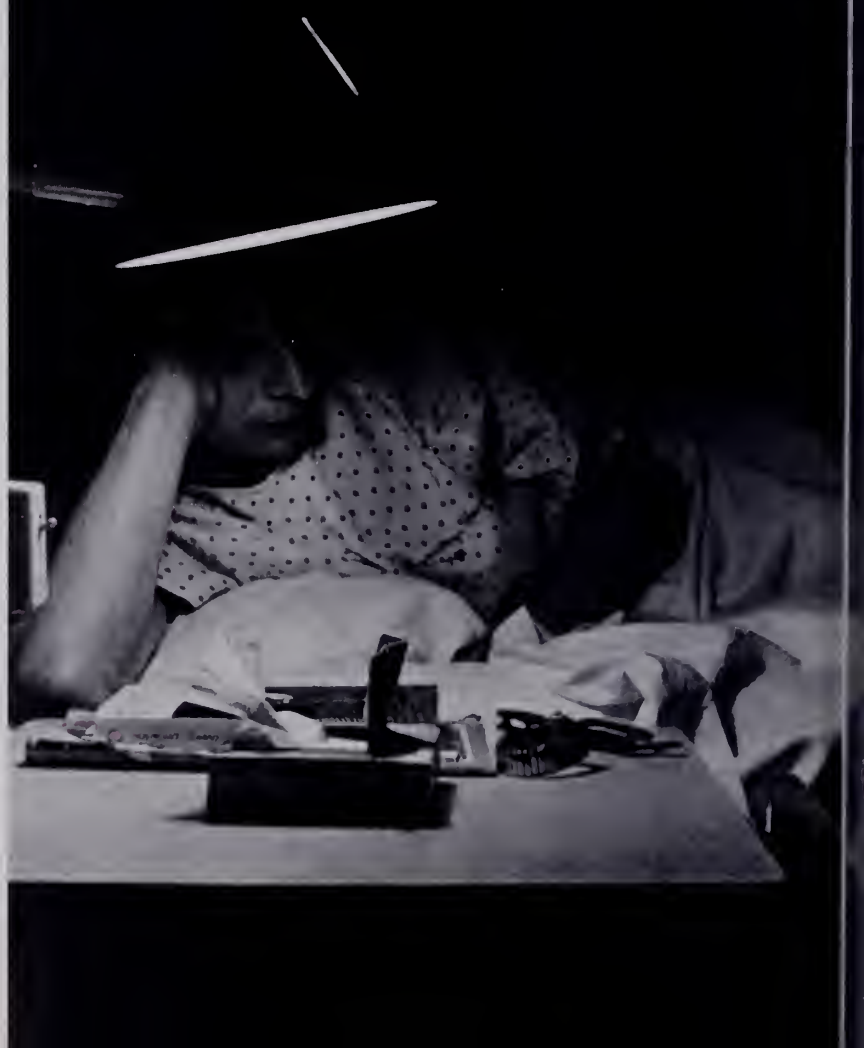

around the state

Vital Statistics

NEW MEMBERS

Barbour County

Shaw, Timothy Dale, b 44, mc Tennessee 71, recip. Tennessee 73, 810 W. Washington Street, Eufaula, Alabama 36027. GP.

Calhoun County

Babb, Oren Wyatt, b 42, mc Vanderbilt 67, recip. NBME 73, Medical Arts Building, Anniston, Alabama 36201. R.

Mobile County

Bayles, Donald Earl, b 38, mc Alabama 63, sb 64, 1720 Springhill Avenue, Mobile, Alabama 36604. PL.

White, Lowell Elmond, Jr., b 28, mc Washington 53, recip. Washington 72, Medical College University of South Alabama, Mobile, Alabama 36688. NS.

MEMBERS DECEASED

Jefferson County

Joseph, Kellie Nicholas, Birmingham, Alabama, Deceased

Morland, Howard C., Birmingham, Alabama, Deceased 7/ 27/73

Simpson, John Williams, Birmingham, Alabama, Deceased 5/22/73

Mobile County

Dismukes, Henry Moseley, Mobile, Alabama, Deceased

Hinton, Lawrence H., Mobile, Alabama, Deceased 2/27/73

Russell County

Knowles, Clyde Murrell, Jr., Phenix City, Alabama, Deceased

CHANGES OF ADDRESS

Barbour County

Bledsoe, William Walton, Jr., present Eufaula to 810 W. Washington Street, Eufaula, Alabama 36027.

Jackson, John Munford, present Eufaula to 810 W. Washington Street, Eufaula, Alabama 36027.

Whitehurst, Richard Marion, present Eufaula to 810 W. Washington Street, Eufaula, Alabama 36027.

Woodbury, Philip Stephen, present Eufaula to 236 W. Broad Street, Eufaula, Alabama 36027.

Yohn, Kenneth Crawford, present Eufaula to 108 N. Randolph Avenue, Eufaula, Alabama 36027.

Calhoun County

Bridges, Thomas Elisha, present Alexandria to P. O. Box 82, Alexandria, Alabama 36250.

Etowah County

Brown, Andrew Marion, present Gadsden to P. O. Box 648, Gadsden, Alabama 35901.

Jefferson County

Arias, Manual, Birmingham, to P. O. Box 477, Pelham, Alabama 35124.

Crommelin, Henry Jr., present Birmingham

to 944 18th Avenue South, Birmingham, Alabama 35205.

Hodo, John Baldwin, present Birmingham to 1500 6th Avenue South, Birmingham, Alabama 35233.

Jones, William Bailey, present Birmingham to 1320 South 19th Street, Birmingham, Alabama 35205.

Keith, Ward Andrew, present Graysville to P. O. Box 273, Graysville, Alabama 35074.

McInnis, Cecil Rush, Jr., present Graysville to P. O. Box 273, Graysville, Alabama 35074.

Scokel, Paul William, III, present Graysville to P. O. Box 273, Graysville, Alabama 35074.

Sullivan, Percy Guin, present Birmingham to 2111 Warrior Road, Birmingham, Alabama 35208.

Tarpley, William Thomas, present Birmingham to 1023 20th Street South, Birmingham, Alabama 35205.

Watkins, Phillip Candler, present Birmingham to 1320 South 19th Street, Birmingham, Alabama 35205.

Wiltsie, Robert Edward, Fairfield, to P. O. Box 4277, Birmingham, Alabama 35206.

Lauderdale County

Tinsley, Terry Brian, present Florence to 216 Marengo Street, Florence, Alabama 35630.

Mobile County

Abell, Raymond Ellery, present Mobile to 1725 Springhill Ave., Mobile, Alabama 36604.

Carlin, John Thomas, Jr., present Mobile to 1400 Center Street, Mobile, Alabama 36604.

Cobb, Jeptha Blacksher, present Mobile to 440 Azalea Road, Mobile, Alabama 36609.

Jeansonne, William Oliver, present Mobile to 1725 Springhill Avenue, Mobile, Alabama 36604.

Toler, Enoch McLain, present Mobile to 1725 Springhill Avenue, Mobile, Alabama 36604.

Morgan County

Pleasant, William Alfred, present Decatur to 315 Church Street, N. W., Decatur, Alabama 35601.

Tuscaloosa County

Willard, William Robert, Tuscaloosa, to Box 6291, University, Alabama 35486.

NEW TELEPHONE NUMBERS

Abell, Raymond E., Jr., Mobile	438-1661
Babb, Oren W., Calhoun	236-3485
Bayles, Donald E., Mobile	433-9507
Brown, John A., Cullman	734-0414
Browning, Russell L., Madison	534-8634
Carter, John C., Jefferson	870-8334
Cobb, Jeptha B., Mobile	344-8480
Doyle, James C., Barbour	687-5153
Ferlisi, Joseph A., Coffee	365-8859
Fisher, Gilbert E., Bullock	738-3197
Fitts, Floyd O., Jr., Tuscaloosa	556-2266
Jackson, John M., Barbour	687-5775
Jeansonne, William O., Mobile	438-1661
Johnson, Joseph W., Covington	222-6531
Keith, Ward A., Jefferson	674-9406
McInnis, Cecil R., Jr., Jefferson	674-9406
Newman, Leonce D., Mobile	478-8666
O'Rear Vernon D., Walker	387-0478
Parnell, Leighton C., Jr., Jefferson	870-8334
Samuels, Joseph W., Jr., Jefferson	933-9211
Scokel, Paul W., III, Jefferson	674-9406
Shaw, Timothy D., Barbour	687-5775
Sullivan, Percy G., Jefferson	786-4339
Taylor, Burt F., Mobile	479-7401
Toler, Enoch M., Mobile	438-1661
Watkins, Phillip C., Jefferson	934-2640
White, Lowell E., Mobile	460-7078

(Continued on Page 178)

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(Continued from Page 176)

Whitehurst, Richard M., Barbour 687-5775

Yohn, Kenneth C., Barbour 687-5756

MEMBERS REINSTATED

Bullock County

Fisher, Gilbert Eugene, b 08, mc Michigan 36, recip. Michigan 40, Route 3, Union Springs, Alabama 36089. GP.

Cullman County

Brown, John Augustus, Jr., b 31, mc Mississippi 60, recip. Mississippi 69, 103 2nd Avenue East, Cullman, Alabama 35055. GPD.

CHANGE OF SPECIALTY

Jefferson County

Smith, Thomas Luther, Jr., 9480 Parkway East, Birmingham, Alabama 35215. P.

Tuscaloosa County

Sharman, Lewis Crook, 500-0 15th Street East, Tuscaloosa, Alabama 35401. P.

MEMBERS REMOVED

Etowah County

Thomas, Spencer, Gadsden, Alabama 35901, Transfer to Nonmember

Fayette County

Seay, John D., Mobile, Alabama 36608, Transfer to Nonmember

Macon County

Foster, Henry W., Tuskegee Institute, Alabama 36088, Transfer to Nonmember

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Apathy can only be overcome by enthusiasm, and enthusiasm can only be aroused by two things: first, an ideal which captures the imagination and, second, a definite, intelligible plan for carrying that idea into practice.

—*Arnold Toynbee*

Study of Twins Reveals New Genetic Influences

Multifaceted studies of a unique panel of twins at Indiana University School of Medicine, Indianapolis, is contributing much new information of scientific and clinical importance.

In research relating to arteriosclerosis and, particularly, on genetic control of plasma lipids in man, it was found that inherited factors appear to make a greater contribution to the cholesterol ester fraction than to free cholesterol. A significant by-product of this work was that for studies of some blood lipids, identical twins were estimated to be over 20 times more efficient for detecting treatment effects than studies of single-born subjects. This, the investigators believe, "could have a profound influence on clinical research."

In the area of calcium metabolism, findings were about 50% of the observed variation in bone density among individuals is genetically determined. This finding may have implications as to the etiology of senile osteoporosis. Also, a comparative analysis of adolescent and adult twins and of changes in intrapair differences with age is developing leads that will permit identification of traits that are influenced by genetic-environmental interactions. Clinically, this technique may permit recognition of those genetic traits which are particularly susceptible to therapeutic intervention.

Development of new chromosome staining techniques has recently revealed the existence of extensive variations in human chromosomes in newborn twins and identification and measurement of the genetic component of this variation is being pursued. (Principal Investigator: Walter E. Nance, M. D., Ph.D.)

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Each suppository contains hydrocortisone acetate 10 mg; bismuth subgallate 2.25%; bismuth resorcin compound 1.75%; benzyl benzoate 1.2%; Peruvian balsam 1.8%; zinc oxide 11.0%; and boric acid 5.0%; plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base containing cocoa butter.

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ANGP-35

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Our skin—the human integument—covers us, defines us, protects us. But skin is subject to cuts, burns, abrasions. And infections. Neosporin Ointment fights infection by providing broad antibacterial action against susceptible skin invaders. It contains antibiotics that are rarely used systemically, reducing the risk of sensitization.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Complete literature available on request from Professional Services Dept. PML.

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Each gram contains: Aerosporin® brand Polymyxin B Sulf 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 (equivalent to 3.5 mg. neomycin base); special white petrolat q.s. In tubes of 1 oz. and ½ oz. and 1/32 oz. (approx.) foil pack

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Home Health Care—Untapped Potential

Seventy-two-year-old Mrs. L. was admitted to the nursing home on October 2, two days after neighbors learned that she had lived for a week on water, a half-loaf of bread and a box of sweetened cereal. Various infirmities kept her from shopping for groceries, and even from preparing meals sometimes. She had no one to do it for her.

"Poor old soul needs somebody to look out for her," one neighbor said. "She needs to be in the nursing home."

The kindly neighbors watched as Mrs. L. was helped down the stairs—and their own taxes were helped up. Mrs. L.'s institutional care would cost roughly $400 a month, about three or four times as much as it would cost to have a part-time "home health aide" do her shopping and help with the meals and housekeeping. But such help was all Mrs. L. needed, and all she wanted.

She left her home with feelings of fear and sadness, a not uncommon reaction. For a 1971 study in Florida showed that "85 per cent of all nursing home residents would prefer to be at home." And physicians associated with the nursing homes said that nearly 20 per cent of the patients did not belong in institutions.

(This is not to say that no patients should be in nursing homes—thousands need the kind of care that is only available in such facilities. But many others do not).

Yet, despite the fact that home health services are far cheaper and are preferred by patients themselves, home care has been virtually ignored in this country.

Instead, health care is geared toward the institution, either the hospital or extended care facility. But the times, and health care needs, have changed, according to those who are trying to get good home care instituted in every community.

There is a "changing age composition of the population and a proportionate increase in long-term illness and disability," the American Medical Association says. These conditions, such as heart disease or pulmonary disorders, "after a dramatic acute phase, are followed by long periods of con-

valescence, rehabilitation and supportive care."

"Obviously, during the acute phase of illness the complex and costly services of the hospital are often necessary," said Dr. Lowell H. Steen of Hammond, Ind., chairman of the AMA Committee on Community Health Care. "In the period of continued disability, however, hospital care on a continuous basis is neither necessary nor desirable."

The social and financial burdens placed on the long-term care patient, his family and society, make it necessary for physicians to work for increased and more appropriate use of home care in their communities, a report by Dr. Steen's committee says.

Although the AMA and other groups have pushed home care for years, little progress has been made, although some scattered bright spots are appearing.

"Support for the development of viable home health services has been minimal," home care expert Brahna Trager wrote in a report to the Senate Committee on Aging. "In such government funding as has been available, home health services have been limited, with regulatory conditions so narrow as to make the product negligible in terms of meeting real need."

"Home health services accounted for less than 20 per cent of the number of claims and less than 1 per cent of the dollars paid out under Medicare in 1971," noted Dr. Steen. And in Medicaid, home health expenditures totaled less than a half per cent of the money paid out, he said.

Because of the lack of adequate home health care programs, doctors frequently, as a matter of conscience, choose to keep a patient in a hospital or other facility to assure the patient some services, if only of the minimal type. And, as one physician said, this means:

"We are warehousing thousands of functioning human beings because they need some relatively inexpensive health care—they can't change their own bed linen or carry the groceries upstairs; or they occasionally need a little help in getting in and out of the bathtub and aren't able to take a bus ride to the doctor."

This "warehousing" not only is damaging to the individuals, but wastes taxpayers' money on unnecessary institutionalization, authorities say. The National Association of Home Health Agencies offered this cost comparison evidence to the Senate committee:

1. If the hospital stay of one patient in 20 was shortened by only one day, at a daily cost of $70, the total hospital cost to the American people would be reduced by almost $100 million. (Since that report was given, hospital costs have climbed until now the average daily cost is about $92).

2. The Department of Health, Education and Welfare said a one-day reduction in the stays of Medicare beneficiaries in 1968 would have cut program costs by *$315 million.*

3. The Kaiser Research Foundation, Portland, Ore., listed the following 1968 daily cost comparison:

A. Home care services, $5.25.

B. Extended care services, $39.08.

C. Hospital care, $76.62.

A revamping of Medicare policies to allow wider utilization of home care is badly needed, the Trager report says.

"The complexities of administration and reimbursement have placed many home health agencies in financial jeopardy," she said. And as a result many such agencies have gone under.

Better home health services—and there are none at all in many areas of the United States—appear capable of not only saving tax money, but of sometimes *generating* tax money by helping people get back to work.

(Continued on Page 189)

ACS Adopts Standards For Surgeon's Assistants

The American College of Surgeons has adopted standards designed to promote high-quality training of surgeon's assistants, one of several new categories of health workers developed in the past few years. These standards set forth requirements for the training institutions and their facilities and faculties, prerequisites for admission to an assistants' training program and the basic curriculum.

In an accompanying memorandum, Dr. C. Rollins Hanlon, director of the College, emphasized that the "Essentials of an Approved Educational Program for the Surgeon's Assistant is not designed to stimulate production of large numbers of surgeon's assistants."

It is, he said, designed "to set high standards so that the public and the profession will be able to recognize a high quality product in this category of health worker."

"Everyone should realize that the surgeon's assistant is not the same as the operating room technician," Dr. Hanlon said. Standards for training this latter category of health worker already have been published in conjunction with the American Medical Association.

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Precautions: As with other thyroid preparations, an overdosage of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's Disease (chronic adrenocortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to pa with cardiovascular disease; developme chest pains or other aggravations of card cular disease requires a reduction in dosag

Contraindications: Thyrotoxicosis, acute my dial infarction. **Side effects:** The effects of THROID (sodium levothyroxine) therapy are in being manifested. Side effects, when th occur, are secondary to increased rates of metabolism; sweating, heart palpitations or without pain, leg cramps, and weight Diarrhea, vomiting, and nervousness have been observed. Myxedematous patients heart disease have died from abrupt incr in dosage of thyroid drugs. Careful observ of the patient during the beginning of any roid therapy will alert the physician to an toward effects.

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most cases with side effects, a reduction of ge followed by a more gradual adjustment rd will result in a more accurate indication e patient's dosage requirements without the arance of side effects.

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Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, U.S.P., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. *49*:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

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Advances Are Being Made In Bone Marrow Transplants

New successes in bone marrow transplantation to restore normal immunological ability to resist disease and infection is reported by a team at the University of Minnesota School of Medicine, Minneapolis.

Using the matched sibling donor technique, correction of severe dual-system immunodeficiency was achieved in five patients. In a sixth case, the team provided direct help and support for a successful transplant that has partially corrected the condition even though the donor marrow was completely mismatched.

Immunodeficiency in two infants with DiGeorge syndrome, in which the thymus fails to develop was also corrected by fetal thymus transplants without any evidence of a graft-versus-host, (GVH) reaction, an often-fatal development in these susceptible children. In the process, new light was also thrown on a crucial issue in theoretical and practical immunobiology as to whether thymus cells are essential to the development of antibody-producing cells. At the same time, the group has devised a faster and simpler micro-method for evaluating the function of thymus-derived cells. In more than 1,200 tests in the past year, the method has proved extremely useful in diagnosis of patients with combined immunodeficiency disease.

Another forward step has been development of a new method for obtaining "pure bone marrow" for transplantation which avoids the GVH reaction. Using this technique, there was no acute form of such reaction in four patients who received incompatible bone marrow transplants. In these four, a new method of gradual transplantation was also employed. A small number of bone marrow cells was used at the start and the amount gradually increased over a three-week period.

As a result of these developments, it is predicted that "in the near future, we will be able to transplant bone marrow regularly across the major barrier of histocompatability matching." (Principal Investigator: Robert A. Good, M. D.)

Microtechnique Improves Blood Lead Measurement

A submicroliter microtechnique to measure blood lead concentration in capillary samples by a flameless atomic adsorption spectrophotometric (AAS) instrument, the carbon rod atomizer, has been developed in conjunction with a simple micro-blood-collecting system at Montefiore Hospital and Medical Center, Bronx, N. Y. The reported sensitivity of this method may be as much as up to 40 times more than conventional AAS methods. At the same time, the overall standard deviation in over 450 blood specimens analyzed in duplicate was 0.91 micrograms/100 ml. It is believed that the highest degree of precision attained with other modifications of the basic flame AAS technique has been a standard deviation of 1.70 micrograms/100 ml.

In addition, these methods allow the accurate measurement of plasma-associated lead, a complex that may well be the more biologically significant fraction of whole blood lead. It is possible that the red cell represents a repository for lead, and that plasma-associated lead, maintained at a relatively constant concentration by larger red cell stores, may contain the exchangeable fraction of whole blood lead. Support for this postulate has come from the demonstration of a rapidly exchangeable lead pool in lead-intoxicated rats treated with calcitonin and challenged with ionized calcium. Displacement of lead from rat erythrocytes by ionized calcium suggests that calcium ion may control lead transport from red cell to plasma and, ultimately, the toxic activities of lead. (Principal Investigator: John F. Rosen, M. D.)

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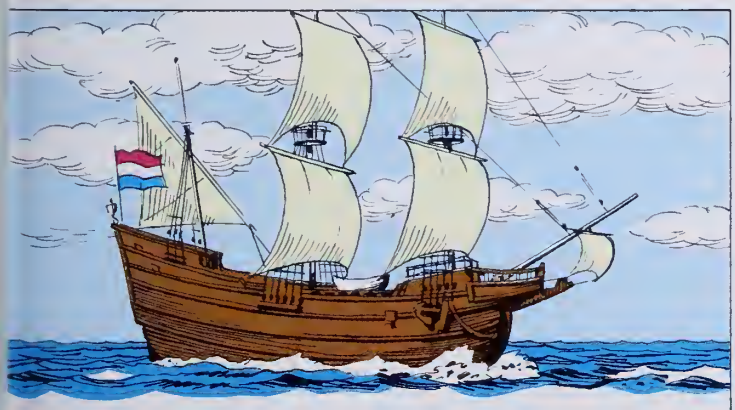

RONSSENS, A DUTCH PHYSICIAN, WROTE IN 1564 THAT "DUTCH SAILORS WHO, RETURNING FROM SPAIN, WERE ATTRACTED BY THE NOVEL RICHNESS OF THE FRUIT (ORANGES) AND BY THEIR GREED AND GLUTTONY, UNEXPECTEDLY DROVE OUT THE DISEASE (SCURVY), AND HAD THIS HAPPY EXPERIENCE NOT ON A SINGLE OCCASION ONLY, BUT REPEATEDLY."

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phenobarbital (warning: may be habit forming)	(¼ gr.) 16.2 mg	(½ gr.) 32.4 mg	(¾ gr.) 48.6 mg

Brief summary. Adverse Reactions: Blurring of vision, dry mout difficult urination, and flushing or dryness of the skin may occur c higher dosage levels, rarely on usual dosage. Contraindicatior Glaucoma; renal or hepatic disease; obstructive uropathy (for e ample, bladder neck obstruction due to prostatic hypertrophy) hypersensitivity to any of the ingredients

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(Continued from Page 182)

Such as in the case of Mr. A., as related by Dora J. Stohl, R. N., in describing the Non-Technical Medical Care Program of the State of Oklahoma:

Mr. A., a 68-year-old bachelor, was an accountant who had been "extremely self-sufficient." He fractured his thigh and spent almost a year in the hospital, undergoing numerous operations. Finally, he was forced to accept public aid, and was admitted to a nursing home because he could not care for himself at home.

"He had lost his independence and was certain it meant vegetating for the rest of his life," Mrs. Stohl wrote in the *American Journal of Nursing*. "(But) a caseworker, his doctor and a niece helped him find a suitable living arrangement, including a (home health care) provider.

"Gradually over six months Mr. A.'s outlook changed. He did more for himself because of conscientiously exercising . . . Mr. A. now can drive a car. He wants to do a little accounting in his home, and in a few months he will go back to his old job."

Home health services—which can benefit *all* Americans who happen to need them, not just the old or poor—should be offered on three levels, according to the Senate report:

1. Intensive or concentrated services, including visits by a physician, nursing visits, physical therapy and other services. Patients usually need this kind of care only for a short time.

2. Intermediate services. Most often applicable to those convalescing from acute illness or with temporary disability related to chronic illness. In addition to physician and nursing care, this frequently includes homemaker-health aide service (that is, someone to fix meals, clean house, etc.).

3. Basic service. Provided to promote health, or to support those who will require services in order to delay or avoid institutionalization. Such assistance — given a couple of hours per day or even a week—is often called "minimal services," but it is not minimal in terms of importance, according to the Senate report: "The services have the greatest potential for utilization by large sections of the population."

However, Mrs. Florence Moore, executive director of the National Council for Homemaker-Home Health Aide Services, Inc., cautions that any programs "should be done properly. You must have standards."

The council is concerned she said, over proposed new regulations of the Department of Health, Education and Welfare that would leave standard-setting up to the states. Current regulations say homemaker services must be in accord with recommended standards of such organizations as the National Council. A lack of reference to any recognized standards would "seriously jeopardize the development of quality homemaker-home health aide services throughout the country," the Council says.

A number of hospitals and insurance programs have entered into home health care, reflecting a trend away from strictly hospital services (insurance policies are also beginning to cover many outpatient services not covered in the past). For example, the Blue Cross Plan of Illinois has a home health care program with 44 participating hospitals. Under it, patients can be discharged from the hospital but continue to get hospital services—doctor and nurse visits, physical therapy, etc.—at home.

The money saving—which "ultimately influences health care premiums," the association says—is considerable: The difference between an average $103.25 daily cost in an Illinois hospital and only $14.30 for home health care.

As an example, Blue Cross cited the case of an 11-year-old boy who was hospitalized 21 days for a bone infection. Then he went home to continue treatment under the Coordinated Home Care plan, getting nursing visits, antibiotic drugs and massage to main-

(Continued on Page 193)

Recommendations† on Combination Live Virus Vaccines

American Academy of Pediatrics

Committee on Infectious Diseases

In the September 15, 1971 *AAP Newsletter* sent to Academy members, the Committee on Infectious Diseases of the American Academy of Pediatrics stated its recommendations on the use of combination live virus vaccines. After a careful review of available data, the committee concluded that:

- "This information indicates that the products are both safe and effective when used as directed."
- The vaccine "...can, therefore, be recommended with the obvious advantages of reduction in the number of injections for any given child and a concomitant decrease in the required visits to a physician's office or clinic."

†For complete text of both recommendations see your MSD representative or write to Professional Service Dept., Merck Sharp & Dohme, West Point, Pa. 19486.

United States Public Health Servic

Advisory Committee on Immunization Practices

In the April 24, 1971 issue of *Morbic and Mortality Weekly Report*, the Adv ory Committee on Immunization Pr tices of the United States Public Hea Service presented recommendations the use of combination live virus vaccir The committee stated that:

- "Data indicate that antibody respo to each component of these combinat vaccines is comparable with antibody sponse to the individual vaccines gi separately.
- "There is no evidence that verse reactions to the combi products occur more f quently or are more sev than known reactions to individual vaccines (see p tinent ACIP recommen tions).
- "The obvious convenie of giving already selec antigens in combined fc should encourage conside tion of using these produ when appropriate."

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Single-dose vials

M-M-R, given in a single injection, fits easily into your routine immunization program for well babies.

Given at age 12 months, M-M-R provides for vaccination early in life against measles, mumps, and rubella.

MSD suggested immunization schedule for well babies	
Age	**Vaccine(s)**
2 months	DPT (diphtheria-pertussis-tetanus) Oral poliomyelitis vaccine (triple)
3 months	DPT[1]
4 months	DPT Oral poliomyelitis vaccine (triple)
6 months	Oral poliomyelitis vaccine (triple)
12 MONTHS	**M-M-R (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE, MSD)**

1. This vaccination may be given at 3 months, 5 months, or at 6 months, depending on your preference or on the condition of the child.

Since vaccination with a live virus vaccine may depress the results of a tuberculin test for four weeks or longer, the test and the vaccine should not be given during the same office visit.

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For a brief summary of prescribing information, please see following page.

M-M-R

(MEASLES, MUMPS AND RUBELL VIRUS VACCINE, LIVE | MSD)

Single-dose vials

No untoward reactions peculiar to the combination vaccine (M-M-R) have been reported.

Moderate fever (101-102.9 F) occurs occasionally. High fever (over 103 F) occurs less commonly. On rare occasions, children who develop fever may exhibit febrile convulsions. Rash (usually minimal and without generalized distribution) may occur infrequently.

Since clinical experience with measles, mumps, and rubella virus vaccines given individually indicates that very rarely encephalitis and other nervous system reactions have occurred, such reactions may also occur with M-M-R. A cause and effect relationship, however, has not been established.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Must not be given to women who are pregnant or who might become pregnant within three months following vaccination.

Contraindications: Pregnancy or possibility of pregnancy within three months following vaccination; infants less than one year old; sensitivity to chicken or duck, chicken or duck eggs or feathers, or neomycin; any febrile respiratory illness or other active febrile infection; active untreated tuberculosis; therapy with ACTH, corticosteroids, irradiation, alkylating agents, or antimetabolites; blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems; gamma globulin deficiency, i.e., agammaglobulinemia, hypogammaglobulinemia, and dysgammaglobulinemia.

Precautions: Administer subcutaneously; do not give intravenously. Epinephrine should be available for immediate use should an anaphylactoid reaction occur. Should not be given less than one month before or after immunization with other *live* virus vaccines; vaccination should be deferred for at least six weeks following blood transfusions or administration of more than 0.02 cc immune serum globulin (human) per pound of body weight, or human plasma.

Due caution should be employed in children with a history of febrile convulsions, cerebral injury, or any other condition in which stress due to fever should be avoided. The physician should be alert to the temperature elevation which may occur after vaccination.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Attenuated live virus measles and mumps vaccines, given separately, may temporarily depress tuberculin skin sensitivity; therefore, if a tuberculin test is to be done, it should be scheduled before vaccination, to avoid the possibility of a false negative response.

Before reconstitution, refrigerate vaccine at 2–8 C (35.6–46.4 F) and *protect from light*. Use only diluent supplied to reconstitute vaccine. If not used immediately, return reconstituted vaccine to refrigerator at 2–8 C (35.6–46.4 F), and discard after eight hours.

Adverse Reactions: Fever, rash; mild local reactio such as erythema, induration, tenderness, region lymphadenopathy; parotitis; thrombocytopenia a purpura; allergic reactions such as urticaria; arthrit arthralgia, and polyneuritis.

Occasionally, moderate fever (101–102.9 F); less co monly, high fever (above 103 F); rarely, febrile co vulsions.

Encephalitis and other nervous system reactions th have occurred very rarely with the individual vaccin may also occur with the combined vaccine.

Transient arthritis, arthralgia, and polyneuritis a features of natural rubella and vary in frequency a severity with age and sex, being greatest in adult f males and least in prepubertal children. Such rea tions have been reported with live attenuated rubel virus vaccines. Symptoms relating to joints (pai swelling, stiffness, etc.) and to peripheral nerves (pai numbness, tingling, etc.) occurring within approx mately two months after immunization should be co sidered as possibly vaccine related. Symptoms ha generally been mild and of no more than three day duration. The incidence in prepubertal children wou appear to be less than 1% for reactions that wou interfere with normal activity or necessitate medic attention.

How Supplied: Single-dose vials of lyophilized va cine, containing when reconstituted not less th 1,000 $TCID_{50}$ (tissue culture infectious doses) measles virus vaccine, live, attenuated, 5,000 $TCID_{50}$ mumps virus vaccine, live, and 1,000 $TCID_{50}$ of rubel virus vaccine, live, expressed in terms of the assign titer of the NIH Reference Measles, Mumps, and R bella Viruses, and approximately 25 mcg neomyci with a disposable syringe containing diluent and fitt with a 25-gauge, ⅝" needle. Also in boxes of 10 singl dose vials nested in a pop-out tray with a separate box of 10 diluent-containing syringes.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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(Continued from Page 189)
tain muscle tone. The cost of 75 days of home care was $450. "If Kenny had been hospitalized, the cost would have been $5,100, just for room and board," the association said.

Many more home programs are needed—there are only about 30,000 home health aides now employed, for instance, against a total estimated need of 300,000, according to the Senate report.

A big push toward more home care could come from Congress, where various legislation is pending, including those national health insurance bills such as the AMA's Medicredit, which feature home care coverage.

Despite the impressive statistics offered in support of home care, particularly on cost, perhaps the best summation of its value was given by a 97-year-old black man in Oklahoma who said:

"If I didn't have anything to eat or a dime to spend, I'd still be happy because I'm at home . . . I can sit here looking out this window and remember those big catfish I got out of that creek."

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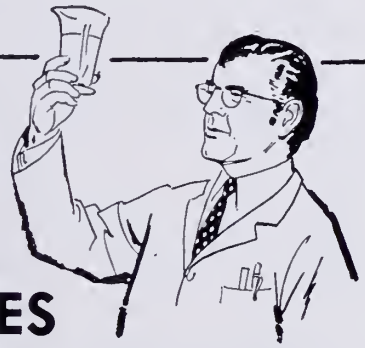

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Hospital People Respond To Tornadoes' Violence

Linda Hammitt, director of nurses at Bibb County Hospital in Centreville, was attending worship services at the Brent Baptist Church on the evening of May 27, when the most devastating of Alabama's numerous Memorial Day weekend tornadoes struck and all but obliterated the town of Brent, destroying the Baptist Church and leaving one dead and many injured there.

Mrs. Hammitt acted quickly, administering first aid and undoubtedly saving many lives at the church until help arrived. Then, although she knew that her home and probably her family had been in the path of the tornado, she found the first available transportation to the place she felt she would be most needed—the hospital.

She worked for nearly six hours without knowing the fate of her family or home Then word came. Her family was fine, but her home was destroyed. Even after hearing this, she worked until around 10:00 Monday morning, when she left to face her personal tragedy.

Working beside Mrs. Hammitt was Mildred Pedigo, lab and X-ray technician at the hospital. She had been in her home, directly behind the Brent Baptist Church, which had received full brunt of the tornado and was demolished.

Getting out of the rubble that had been her home, Mrs. Pedigo too sought transportation to the hospital, but found she had to walk a long way before finding a ride. Finally reaching the hospital, she stayed all night and most of the next day before returning to sift through the wreckage of her home.

These are but two stories of personal courage and dedication that came out of that black Sunday night, as hospitals across the state of Alabama prepared to effect their "disaster plans," readying for the possibility of receiving tornado victims.

Bibb County Hospital's disaster plan was put into effect immediately, and 29 victims from the Brent area were brought to the hospital for treatment. Four seriously injured victims were taken to Tuscaloosa's Druid City Hospital for admission.

Due to disaster drills held in the past, available staff members at Bibb County Hospital enacted the plan, filling out emergency room forms, tagging the patients, directing incoming patients to available quarters, aiding the injured and frightened.

Although hospital staff members could not be contacted due to the community-wide communications blackout, they came anyway.

And it was the same in hospitals across the state.

Hale County Hospital in Greensboro was also without communications, as the same tornado had wiped out all utilities in the hard-hit West Alabama town. But hospital employees and rescue personnel from neighboring towns were on the spot almost immediately, treating the 60 victims who came to the hospital. Of these, six were sent to nearby hospitals for admittance and three were admitted to Hale County Hospital.

A Eutaw physician, Dr. Rucker Staggers, had been visiting his father in Selma and was traveling cross-state to his home when a tree was blown down in his path on Greensboro's bypass highway. Recognizing that medical assistance might be needed, he left his car and made his way to Hale County Hospital where he worked with local physicians and a team of three doctors from nearby Demopolis for several hours.

Patients began to arrive at Shelby Memorial Hospital in Alabaster early Sunday evening, and as the number of victims from the Calera, Columbiana and Wilsonville areas mounted, key hospital staffers were "alerted." Finally, at 10:15 p. m., the disaster plan was put into effect. In all, 42 victims were brought to the hospital, 12 of these admitted and two, requiring intensive care, transferred to Birmingham's University Hospital.

All hospital personnel who were called to assist responded. Doctors and nurses who heard the news via television and radio responded without being called. None ever even asked about pay for those long tedious hours.

Dr. Tom Moore, a pediatrician on the staff of Lloyd Noland Hospital in Fairfield, happened to be at a service station in Vestavia when he saw several ambulances heading in the direction of Shelby Memorial Hospital. He followed the ambulances, presented himself at the emergency room, and offered his services, which were gratefully accepted.

One of the hospital's employees, a switchboard operator, who had had surgery only four days prior to the disaster, got out of her hospital bed, went to the switchboard and manned it until the "all clear" was given at 2:15 a. m.

Administrator Chester Black, who, himself, transported treated victims back to their homes to check on their cattle and their neighbors, said that the hospital's disaster plan, operating under authentic circumstances, was much more effective than any drill prior to that time.

The disaster plan at East End Memorial Hospital, Birmingham, was activated early in the evening, when word arrived that suburban Center Point had been ravaged by a tornado at around 7 p. m. Within 45 minutes ten physicians were on hand, and other hospital staff members and volunteers were equally responsive.

During the four hours that followed, 27 patients were treated in the emergency room, and four were admitted—two requiring surgery.

Not included in the official count of victims was a small dog, brought into the hospital by a little boy. The boy, with his dog in his arms, waited quietly and patiently in the lobby while his mother underwent hours of treatment and observation.

Finally, the boy decided to seek treatment for his injured pet, and attracted the attention of hospital personnel when he attempted to enter an unauthorized area of the emergency department. Recognizing the problem, sympathetic nurses took time to remove the glass from the pup's foot and bandage it.

At Birmingham's Brookwood Hospital, special attention was given to a 12-year-old boy from Wilsonville who received emergency room treatment. His parents, more seriously injured, were admitted to the hospital. The boy's clothes were in shreds and he was obviously frightened. After a great deal of effort, hospital personnel contacted the boy's uncle, and while waiting for the uncle to arrive, they arranged for clothing to be donated to the boy by a local merchant.

At Birmingham's Baptist Medical Center-Montclair, more than 20 employees voluntarily reported in and some 50 others called in to see if they were needed. Although only one victim was received in the hospital's emergency room, a team of two doctors, two nurses, and x-ray technician and a male attendant was dispatched to the scene of the destruction in Center Point.

At Druid City Hospital in Tuscaloosa, where 35 victims of tornadoes in Brent, Centreville and Greensboro were received (19 of them admitted), the disaster plan was never put into effect. So many people responded spontaneously that additional calls were not issued.

Food service personnel came in and pre-

pared coffee and sandwiches for those who were under pressure in patient areas. Calls poured in from other institutions, employees and members of the community, volunteering assistance.

When a request for blood was issued, the response was so great that some 50 persons were turned away because the hospital already had all the donors it could handle.

A 15-month-old child was brought in from Centreville with a small cut on his head. Word was that his parents were missing. Lucy Jordan, community relations director at Druid City, took charge, holding the frightened child until his parents were located several hours later.

Reports from many other hospitals read like Druid City's story. The disaster plan was never enacted because volunteer response was so great. Even at Sylacauga Hospital, which received 18 persons injured by tornadoes in Childersburg, Alpine and Talladega, staff members on earlier shifts stayed at the hospital and others reported in voluntarily, making activation of the full disaster plan unnecessary.

Mercifully, none of the tornadoes destroyed hospital facilities in Alabama, although Hale County Hospital in Greensboro suffered damage to its roof and one wing, causing some patients to be moved from the damaged area. Another close call came at Centreville's Bibb County Hospital, where the tornado left devastation on either side of the hospital, blocking the emergency entrance with trees and debris, but only breaking a window in the hospital itself.

L. R. Jordan, president of Birmingham's Baptist Medical Centers and president of the Alabama Hospital Association, said, "As institutions, Alabama's hospitals performed admirably, meeting the challenge of nature's violence and providing needed services."

"But the real story that came out of Alabama's hospitals on that treacherous night

(Continued on Page 199)

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: **Gastrointestinal** (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: **Adults**—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512

When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

lies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended.

The Rx that says "Relax"

BUTISOL Sodium provides highly predictable sedative effe
minor dosage adjustments are usually all that's needed to produce the desired degree of sedation. (With 3 dosage for and 4 strengths to make adjustments easy.)

BUTISOL Sodium offers prompt, smooth, relatively non-cumulative action: begins to work within 30 minutes... yet, because of its intermediate rate of metabolism, generally ha neither a "roller-coaster" nor a "hangover" effect.

BUTISOL Sodium is remarkably well tolerated:
a 30-year safety record assures you that there is little likelih of unexpected reactions.

BUTISOL Sodium saves your patients money:
costs less than half as much as most commonly prescribed sedative tranquilizers.*

These are four good reasons for prescribing BUTISOL Sodium for the many patients who need to have the pace se just a little slower. Its gentle daytime sedative action is ofter all that's needed to help the usually well-adjusted patient cope with temporary stress.

*Based on surveys of average daily prescription costs.

Butisol SODIU
(SODIUM BUTABARBITAL)

Contraindications: Porphyria, sensitivity to barbiturates, or susceptibility to dependence on sedative-hypnotics. **Warning:** May be habit forming. **Precautions:** Exercise caution in: moderate to severe hepatic disease; withdrawal in drug dependence or the taking of excessive doses over a long period, to avoid withdrawal symptoms; elderly or debilitated patients, to avoi possible marked excitement or depression; use with alcohol or other CNS depressants, because of combined effects. **Adverse Reactions:** Drowsiness daytime sedative dose levels, skin rashes, "hangover" and gastrointestinal disturbances are seldom seen. **Usual Adult Dosage:** For daytime sedation, 15 mg. to 30 mg. t.i.d. or q.i.d. For hypnosis, 50 mg. to 100 mg. **Available as:** Tablets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. per 5 cc. (alcohol 7%) BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg., 30 r 50 mg., 100 mg.

McNEIL McNeil Laboratories, Inc., Fort Washington, Pa. 19034

(Continued from Page 196)

was a personal one," Jordan said, "a story of the people who make up those institutions and the volunteers who stood ready to provide assistance. Their response to disaster wove a story all its own—a story of human warmth and compassion on that bleakest of Memorial Day weekends."

Statement On Venereal Diseases

Council On Environmental, Occupational, and Public Health, AMA

Gonorrhea ranks first (excluding influenza) and syphilis third among the reportable diseases in the United States. During 1972, there were 767,215 gonorrhea cases reported, 14.5% higher nationally than the previous year and more than double the number reported in 1965. Increases have occurred in all parts of the nation and in all age and sex groups, but the largest concentration of cases is in the 15-24 year age group. Allowance for both under reporting and failure to diagnose all cases as they occur suggests that the actual occurrence of gonorrhea infection last year was about 2.5 million.

The Center for Disease Control estimates that the reservoir of gonorrhea includes 6 to 800,000 females and about 100,000 males that are asymptomatic. To help reduce this reservoir of silent carriers, most states have implemented gonorrhea screening programs for females. The Center for Disease Control reports that from July 1972 to March 1973 there were 3,117,022 females screened and 158,604 (5.1%) had a positive test for gonorrhea. Of 664,110 females tested in private physician offices throughout the nation, 2.5% had a positive culture for gonorrhea. The Council urges medical societies to promote gonorrhea culture screening among females.

During 1972, syphilis morbidity (all stages) exceeded 91,000 reported cases. The number of congenital syphilitics under one year of age numbered 383 in 1972. Reported cases of primary and secondary syphilis (the infectious stages) numbered 24,429, up 3% from the previous year, with an estimated 85,000 cases occurring annually. Because large numbers have escaped detection over the years, it is estimated that if every person in the United States could be tested for syphilis today, about ½ million previously untreated cases would be found.

An important procedure used to identify persons infected with syphilis or gonorrhea is laboratory reporting to public health authorities of those persons who have a positive test for either. The patient is contacted through his own physician for diagnosis and treatment if necessary. The following states do not have laws or health department regulations that require laboratories to report persons with positive VD tests to health authorities: Alaska, Idaho, Indiana, Louisiana, Maine, Massachusetts, North Dakota, South Dakota and Washington. Experience has shown that many laboratories refuse to report persons with a positive test for venereal disease to the health department until it is required by law or regulation. The Council recommends that medical societies in these states take appropriate action for the enactment of laws or regulations that require laboratories to report the positive venereal tests.

With the exception of Wisconsin, all the states now have laws or regulations permitting the treatment of minors for venereal disease without parental consent. It is believed, however, that some of the states' laws and regulations are so worded to make them inadequate. Also, some of the states might improve their laws by broadening the age group definition of minors.

Physicians in private practice treat approximately 80% of the syphilis and gonorrhea that comes to diagnosis but report to public health departments only one out of every eight cases of syphilis and one out of

every nine cases of gonorrhea they treat. Physicians should assist public health departments by reporting the venereal disease cases they treat. Medical societies are urged to cooperate and give broad support to public health authorities. Much effort must still be made by health departments and medical societies to foster mutual trust so that public and private medicine can work effectively for the control of both syphilis and gonorrhea. Most state and some local health departments have venereal disease interviewer-investigators who can work confidentially with the patient and his contacts to determine the source and spread of his infection. The Council urges the physician to utilize the services of these trained investigators.

Adequate therapy of venereal disease, using the right forms and dosages of antibiotics, is essential. Neisseria gonococci has shown the ability to develop resistance to penicillin to the point where the recommended dosage now is 4.8 million units of Aqueus procaine penicillin for the treatment of gonorrhea in both males and females. It is anticipated that additional changes in treatment may have to be made from time to time as increasing resistance becomes a problem or more effective antibiotics are discovered. For this reason the Council urges that medical societies impress upon their members the need for keeping abreast of changes in the recommended therapy of the venereal diseases.

The Council encourages the publication of more articles in professional journals on venereal disease and its control for the guidance of the profession. Medical societies are asked to support education of parents and the public through more extensive and imaginative use of all available media and through school curriculum.

The Council urges medical societies to acquaint their membership with the growing and alarming dimensions of the venereal disease problem. Physicians should take all appropriate measures to reverse the rise in venereal disease and bring it under control.

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Clean sweep

with a single dose of Antiminth (pyrantel pamoate) ORAL SUSPENSION

Highly effective against pinworm and roundworm

Non-staining to teeth or oral mucosa on ingestion, to stools, clothing, linen

Simple dosage with a single-dose regimen: 1 cc. per 10-lb. body weight (1 tsp./50 lb.; maximum dose, 4 tsp.)

Well-tolerated, based on clinical studies*

Pleasant-tasting, easy-to-take, caramel-flavored oral suspension

Economical, because one prescription can treat the entire family

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

ANTIMINTH®
(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

While Antiminth is highly effective against pinworms and roundworms, the illustration is not meant to imply 100% efficacy.
*Data on file at Roerig.

Please see prescribing information on facing page.

POWELL & HYDE Sts.
313
SAN FRANCISCO MUNICIPAL RAILWAY

If he's making the rounds of San Francisco...

Antivert®/25 (25 mg. meclizine HCl) for vertigo*

ntivert® (meclizine HCl) has been found ful in the management of vertigo associ- d with diseases affecting the vestibular sys- m. It is available as Antivert (12.5 mg. clizine HCl) and Antivert/25 (25 mg. clizine HCl) scored tablets for conven- ce and flexibility of dosage. Antivert/25 5 mg. meclizine HCl) Chewable Tablets available for the management of nausea, miting, and dizziness associated with mo- n sickness.

NDICATIONS. Based on a review of this drug by he National Academy of Sciences-National Research Council and/or other information, FDA has classified he indications as follows:

Effective: Management of nausea and vomiting and lizziness associated with motion sickness.

Possibly Effective: Management of vertigo asso- iated with diseases affecting the vestibular system.

Final classification of the less than effective indica- ions requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddines and headache have occurred. Rarely, tinnitus, hyperirritability numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis an parenchymal liver damage; hyperglycemia; transient leukope malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

Chewable
Tablets 500 mg
Mintezol®
(THIABENDAZOLE | MSD)

so easy to take
everyone in the family
can keep to the
regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole, boxes of 36, strip packaged, individually foil wrapped; suspension, containing 500 mg thiabendazole per 5 ml, in bottles of 120 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

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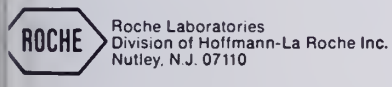
Before deciding to make Valium
zepam) part of your treatment
n, check on whether or not the
ent is presently taking drugs
, if so, what his response has
n. Along with the medical and
al history, this information can
b you determine initial dosage,
possibility of side effects and
ultimate prospects of success
ilure.

While Valium can be a most
lful adjunct to your counseling,
ould be prescribed only as long
cessive psychic tension per-
t and should be discontinued
n you decide it has accom-
ned its therapeutic task. In
eral, when dosage guidelines
ollowed, Valium is well
ated (see Dosage). For con-
ence it is available in 2-mg, 5-mg
10-mg tablets.

Drowsiness, fatigue and ataxia
been the most commonly re-
ed side effects.

Until response is determined,
ents receiving Valium should
autioned against engaging in
rdous occupations requiring
plete mental alertness, such
iving or operating machinery.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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THE JOURNAL

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Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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One 30-mg capsule *h.s.*—usual adult dosage
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Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening, in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Opinion & Dialogue

"Prescription drugs – who should determine the maker?"

Dispenser of Medicine

Clifton J. Latiolais
President
American Pharmaceutical Association

Maker of Medicine

C. Joseph Stetler
President
Pharmaceutical Manufacturers Association

"Too many doctors are indiff ent to the economic consequence their decisions." So stated a recen issue of *Medical News Report* (De cember 4, 1972), an independent weekly newsletter published by for AMA Chief Executive F. J. L. Blasir game, M.D.

Doctor, are you indifferent...?

In discussing an anticipated crease in Blue Shield rates, Dr. Bl ingame's newsletter had this to sa

"In general, it can be said, M have given the impression they ar not particularly concerned with th increase in cost of health care to t patients...

"True, an MD's training is pr marily scientific, but in the real w of practice, all of his scientific dec sions have a price tag, or an econ impact. The economics of health beckon the practitioner's attentio Concern for economics of medicir

When the pharmacist recom mends that a drug product other t the one ordered be dispensed, the prescriber invariably permits the change when he feels the best inte ests of the patient will be served.

Shortcomings of Pro-Substitution Argument

The fact remains that it is ne sary for the prescriber to know tha the change is being contemplated and to be in a position to consent demur. Without that opportunity, t unilateral decision of the pharmac made in the absence of clinical kn edge of the patient, could expose to needless risks, and in addition, jeopardize the relationship betwe the professions of Pharmacy and Medicine. In my view, there is noth in the pro-substitution argument t offsets these risks.

The Issue of Drug Knowledge

Substitution advocates claim that the primary justification for changing the rules is the desire to better utilize pharmacists' knowle about drugs. Yet the pharmacist's task to keep current on the entire field of drug therapy, to some deg puts him at a disadvantage. Most often, a practicing physician will n expert knowledge of no more than

Advertisement

ıld be an obligation of medical tice...

"Medical societies ought to con- continuing campaigns to point he substantial savings that could ealized thru deductible insurance protection for catastrophic ill- s. At the very least, they should, in patients' interest, question the ics of any insurance organization raises health care costs by forc- policyholders to buy insurance may not need or want and prob- won't ever use.

"Too many doctors are indifferent to the economic consequences of r decisions. Too many, for ex- ple, habitually hospitalize patients the convenience of the MD. It's sense to deny such habits exist...

"Doctors, thru their medical so- ies, have unhesitatingly appealed heir patients for support in the t against government interference the private practice of medicine. d the public in the past has re- nded. It's time the American Med- Association and state and local dical societies paid off the debt by isive action to hold down the cost medical care."

st of Drugs

Insurance rates and hospital arges are only two factors in health care costs. The cost of drugs—both prescription and nonprescription—is another.

And when it comes to drug costs, the nation's pharmacists *are concerned*. Through their national professional society, the American Pharmaceutical Association, pharmacists are advising the public to use nonprescription medication cautiously and conservatively, and to seek the advice of their pharmacist before selecting or purchasing such drugs.

Outdated Laws

The pharmacist also is aware that when it comes to prescription drugs, often he has an even greater opportunity to reduce the cost to the patient—with no sacrifice in the quality of the medication dispensed. But in many states, outdated and antiquated laws prevent the pharmacist from engaging in drug product selection. "Drug product selection" simply means that the pharmacist functions in the patient's interest by consciously choosing, from the multiple brands available, a low-cost quality brand of the specific drug to be dispensed in response to the physician's prescription order.

Much *misinformation* has been purposely spread by those who stand to gain financially by maintaining high drug costs to the public. An endless stream of propaganda has emanated from the drug industry in an effort to persuade the medical profession that these so-called anti-substitution laws should be retained. And as long as these laws are retained, the drug industry will continue its current marketing practices which contribute unnecessarily to high drug costs to patients. These practices also are inviting government agencies to expand their restrictive controls on physicians and pharmacists.

APhA Efforts

As pharmacists, we are concerned about health care costs. We hope that every physician shares our concern on this vital issue, and will give his personal support to the constructive efforts APhA has undertaken in the interest of all patients.

(For a complete discussion of drug product selection, you are invited to request a free copy of the "White Paper on the Pharmacist's Role in Product Selection" from: American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D.C. 20037.)

---

30 drugs that he selects to treat the ajority of conditions encountered in practice. Moreover, the physi- n's choice of a specific brand is sed on his knowledge of the pa- nt's medical history and current ndition, and his experiences with e particular manufacturer's oduct.

Some substitution proponents ve argued that the dispensing of a escription is a simple two-party nsaction between the pharmacist d the patient, and that a substitut- g pharmacist may avoid even a chnical breach of contract by simply tifying the patient that he is making e substitution. I would judge that w courts would be sympathetic ward a pharmacist who substituted thout physician approval and who ndertook a legal defense that seeks make the patient responsible for e pharmacist's actions.

educed Prescription Prices?

Substitution advocates are ggesting to the consumer, and par- cularly the consumer activist, that educed prescription prices could llow legalization of substitution. e have seen absolutely no evidence justify this claim. To the contrary, perience in Alberta, Canada, where bstitution is authorized, suggests the opposite.

Many pharmacists understandably are concerned about the cost of maintaining multiple stocks of similar products. While there is no doubt that inventory costs rise when additional brands are stocked, it would be interesting to know how much they rise, and how many pharmacists actually stock *all* brands—of, say, ampicillin or tetracycline—or how long they keep "slow moving" products on their shelves before they are returned for credit. To ask that the industry eliminate multiple sources is to ask competitors to stop competing.

Drug Substitution—A License for the Unethical

Anti-substitution repeal would favor "corner cutting" pharmacists and manufacturers. For them, free substitution would be not a right, but a license. As an aftermath, it is quite likely that the confidence of both physicians and patients in the profession of Pharmacy would be eroded, as revelations about the unconscionable behavior of an undisciplined few were magnified in the press or in professional circles.

Summary

In short, what the American Pharmaceutical Association advocates as a broad-spectrum panacea looks to us to be not only a minority view (advocacy of substitution is by no means a uniform policy in Pharmacy), but also an extraordinarily costly and ineffective remedy, whose side effects are odious. We believe (1) that an impressive majority of pharmacists prefer to work with Medicine and with industry, for the consumer, and for the general good, (2) that they seek the privilege to substitute when the patient might gain and when the patient's doctor agrees, and (3) that they seek to work for the resolution of genuine grievances openly and professionally.

(For amplification of PMA views, please write for our booklet, "The Medications Physicians Prescribe: Who Shall Determine the Source?" It is available from: Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.)

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1155 Fifteenth Street, N.W.
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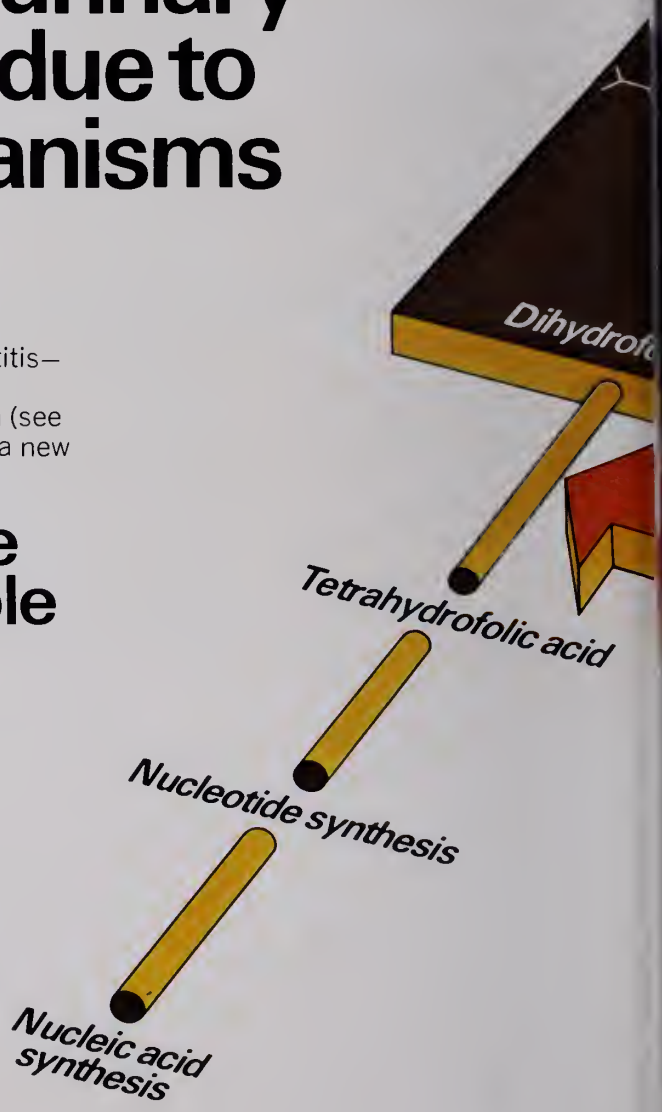
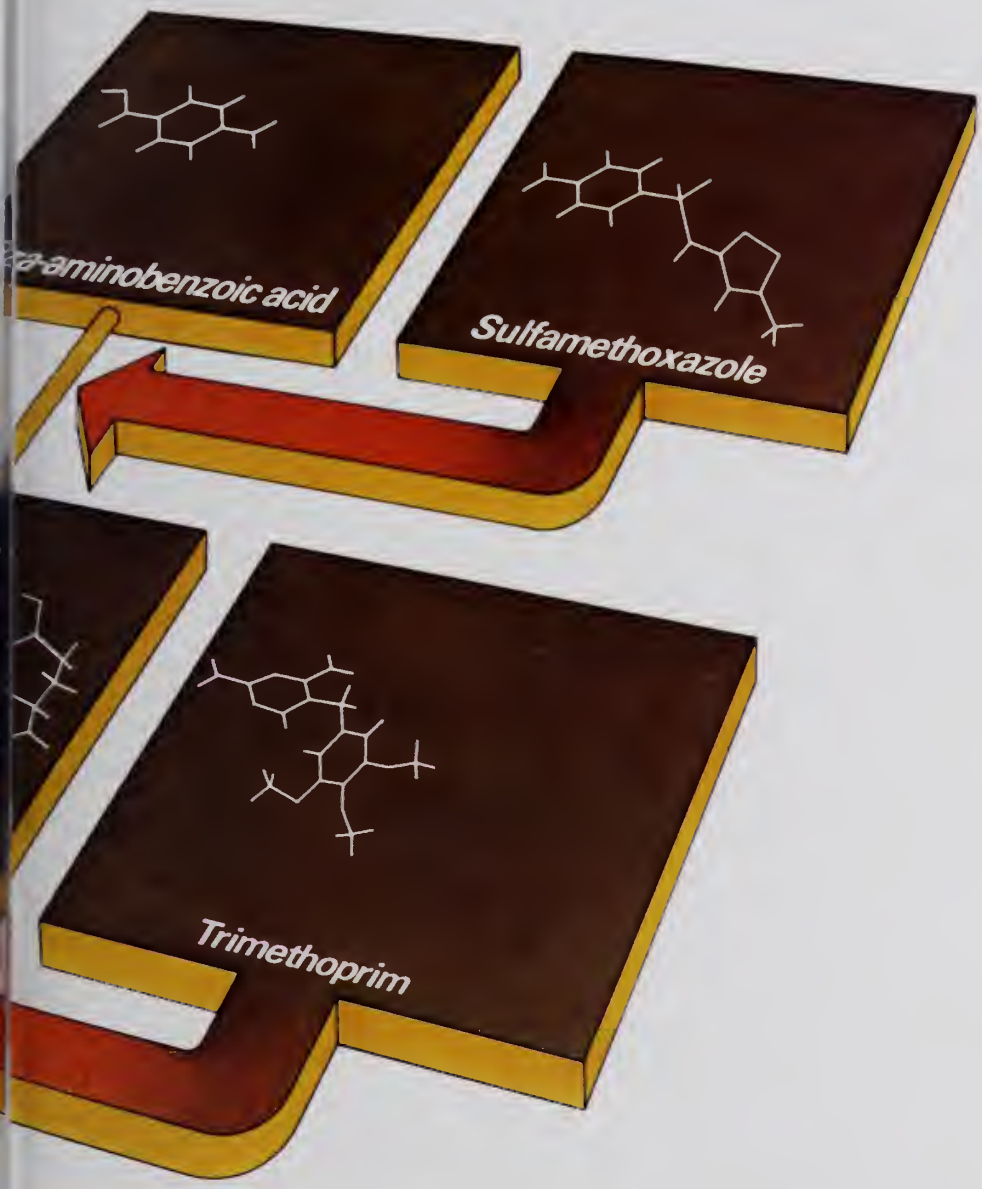
a new type of antibacterial for a two-pronged attack against chronic urinary tract infections due to susceptible organisms

Bactrim is highly effective in the treatment of these infections—primarily pyelonephritis, pyelitis and cystitis—when due to susceptible organisms. This efficacy is related to the unique mode of action against bacteria (see illustration), an action that, in effect, makes Bactrim a new type of antibacterial.

Bactrim interrupts the life cycle of susceptible bacteria

Unique mode of action interrupts the life cycle at two important points, thereby impeding the production of nucleic acids and proteins essential to these bacteria. These consecutive interruptions occur because sulfamethoxazole and trimethoprim resemble naturally existing substrates. By competitive replacement of these substrates, they inhibit further synthesis.





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A multiclinic, double-blind study* of response to a ten-day course of therapy in 471† patients with chronic urinary tract infections demonstrated the superiority of Bactrim. On the 10th day after initiation of therapy, 91.7% (of 168 patients) showed significant bacteriological response to Bactrim, compared with 81.2% (of 144 patients) to trimethoprim and 64.5% (of 155 patients) to sulfamethoxazole. More than half of these patients had obstructive complications.

Excellent response maintained

Bactrim proved equally impressive in maintaining this bacteriological response. In the above study, after a ten-day course of therapy with Bactrim, 68.4% of patients with chronic urinary tract infections *maintained* response for up to 42 consecutive days, compared with 59.7% with trimethoprim and 44.4% with sulfamethoxazole. These results are particularly noteworthy considering the number of patients with obstructive complications—cases regarded as being notoriously difficult to treat.

Prescribing considerations

Clinical Limitations: Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of all antibacterial agents, especially in the treatment of chronic and recurrent urinary tract infections. Not recommended for children under twelve.

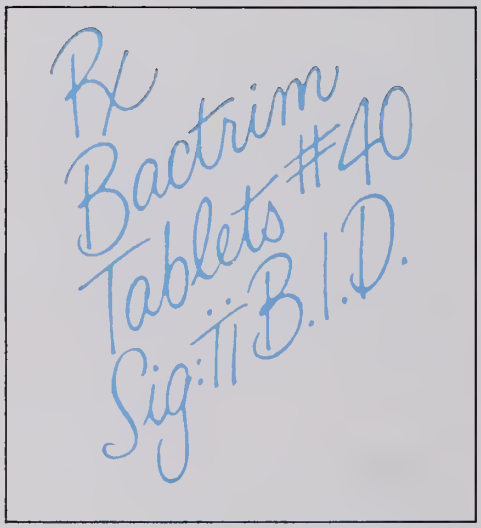
Contraindications: Hypersensitivity to trimethoprim or sulfonamides. Pregnancy and during the nursing period.

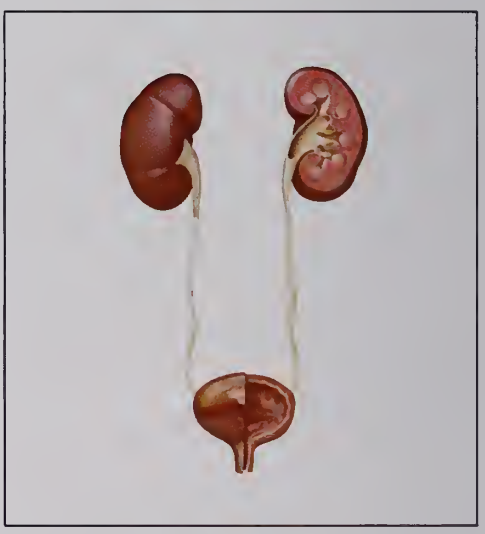
Warnings and Precautions: Both sulfamethoxazole and trimethoprim have been reported to interfere with hematopoiesis. Complete blood counts should be done frequently. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued. Bactrim should be given with caution to patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. Maintain adequate fluid intake. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Effects: Among the most common side effects are nausea, vomiting, rash, leukopenia and elevations in SGOT and creatinine.

Usual adult dosage: two tablets every twelve hour for 10 to 14 days; no loading dose required.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07110
†4 patients not available for evaluation at day 10.





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for chronic urinary tract infections

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Roche Laboratories
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Nutley, N J 07110

te Product Information:

tion: Bactrim is a synthetic antibacterial combination prod- ailable in scored light-green tablets, each containing 80 mg oprim and 400 mg sulfamethoxazole.

hoprim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine. white to light-yellow, odorless, bitter compound with a molec- ight of 290.3.

ethoxazole is N^1-(5-methyl-3-isoxazolyl) sulfanilamide. It is ost white in color, odorless, tasteless compound with a mo- weight of 253.28.

: *Microbiology:* Sulfamethoxazole inhibits bacterial synthesis drofolic acid by competing with *para*-aminobenzoic acid. hoprim blocks the production of tetrahydrofolic acid from di- olic acid by binding to and reversibly inhibiting the required e, dihydrofolate reductase. Thus, Bactrim blocks two con- e steps in the biosynthesis of nucleic acids and proteins al to many bacteria.

studies have shown that bacterial resistance develops more with Bactrim than with trimethoprim or sulfamethoxazole

serial dilution tests have shown that the spectrum of anti- al activity of Bactrim includes the common urinary tract ens with the exception of *Pseudomonas aeruginosa*. The fol- organisms are usually susceptible: *Escherichia coli, Kleb- nterobacter, Proteus mirabilis* and indole-positive proteus es.

Representative Minimum Inhibitory Concentration Values for Bactrim-Susceptible Organisms
(MIC—mcg/ml)

ria	Trimeth- oprim alone	Sulfameth- oxazole alone	TMP/SMX (1:20) TMP	SMX
richia	0.05—1.5	1.0 —245	0.05—0.5	0.95— 9.5
us spp. positive	0.5 —5.0	7.35 —300	0.05—1.5	0.95—28.5
us ilis	0.5 —1.5	7.35 — 30	0.05—0.15	0.95— 2.85
ella- bacter	0.15—5.0	0.735—245	0.05—1.5	0.95—28.5

Pharmacology: Bactrim is rapidly absorbed following oral istration. The blood levels of trimethoprim and sulfamethoxa- e similar to those achieved when each component is given Peak blood levels for the individual components occur one hours after oral administration. The half-lives of sulfameth- e and trimethoprim, 10 and 16 hours respectively, are rela- he same regardless of whether these compounds are admin- as individual components or as Bactrim. Detectable ts of trimethoprim and sulfamethoxazole are present in the 24 hours after drug administration. Free sulfamethoxazole methoprim blood levels are proportionately dose-dependent. eated administration, the steady-state ratio of trimethoprim amethoxazole levels in the blood is about 1:20.

ethoxazole exists in the blood as free, conjugated and pro- ound forms; trimethoprim is present as free, protein-bound etabolized forms. The free forms are considered to be the eutically active forms. Approximately 44 percent of trimeth- and 70 percent of sulfamethoxazole are protein-bound in the The presence of 10 mg percent sulfamethoxazole in plasma ses the protein binding of trimethoprim to an insignificant ; trimethoprim does not influence the protein binding of ethoxazole.

ion of Bactrim is chiefly by the kidneys through both glomer- ltration and tubular secretion. Urine concentrations of both ethoxazole and trimethoprim are considerably higher than e concentrations in the blood. When administered together Bactrim, neither sulfamethoxazole nor trimethoprim affects inary excretion pattern of the other.

tions: Chronic urinary tract infections (primarily pyelonephri- elitis and cystitis) due to susceptible organisms (usually *i, Klebsiella-Enterobacter, Proteus mirabilis,* and, less fre- ly, indole-positive proteus species).

tant note: Currently, the increasing frequency of resistant organ- s a limitation of the usefulness of all antibacterial agents, espe- n the treatment of chronic and recurrent urinary tract infections.

indications: Hypersensitivity to trimethoprim or sulfonamides. ancy and during the nursing period (see Reproduction s).

ngs: Deaths associated with the administration of sulfonamides been reported from hypersensitivity reactions, agranulocyto- plastic anemia and other blood dyscrasias. Experience with thoprim alone is much more limited, but it has been reported erfere with hematopoiesis in occasional patients. In elderly ts concurrently receiving certain diuretics, primarily thia- an increased incidence of thrombopenia with purpura has reported.

The presence of clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts should be done frequently in patients receiving Bactrim. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued.

At the present time, there is insufficient clinical information on the use of Bactrim in infants and children under 12 years of age to recommend its use.

Precautions: Bactrim should be given with caution to patients with impaired renal or hepatic function, to those with possible folate deficiency and to those with severe allergy or bronchial asthma. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis may occur. This reaction is frequently dose-related. Adequate fluid intake must be maintained in order to prevent crystalluria and stone formation. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Reactions: For completeness, all major reactions to sulfonamides and to trimethoprim are included below, even though they may not have been reported with Bactrim.

Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia.

Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis.

Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis.

C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness.

Miscellaneous reactions: Drug fever, chills, and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L. E. phenomenon have occurred.

The sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents. Rats appear to be especially susceptible to the goitrogenic effects of sulfonamides, and long-term administration has produced thyroid malignancies in the species.

Dosage and Administration: Not recommended for use in children under 12 years of age.

The usual adult dosage is two tablets every 12 hours for 10 to 14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

How Supplied: Tablets, containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10. Imprint on tablets: ROCHE 50.

Reproduction Studies: In rats, doses of 533 mg/kg sulfamethoxazole or 200 mg/kg trimethoprim produced teratological effects manifested mainly as cleft palates. The highest dose which did not cause cleft palates in rats was 512 mg/kg sulfamethoxazole or 192 mg/kg trimethoprim when administered separately. In two studies in rats, no teratology was observed when 512 mg/kg of sulfamethoxazole was used in combination with 128 mg/kg of trimethoprim. However, in one study, cleft palates were observed in one litter out of 9 when 355 mg/kg of sulfamethoxazole was used in combination with 88 mg/kg of trimethoprim.

In rabbits, trimethoprim administered by intubation from days 8 to 16 of pregnancy at dosages up to 500 mg/kg resulted in higher incidences of dead and resorbed fetuses, particularly at 500 mg/kg. However, there were no significant drug-related teratological effects.

BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

President's Page

Media Report To The Membership

It is with pleasure that I report to you that the Association's financial house is in excellent shape. This fact was presented to us in our last meeting by our very able Secretary, Dr. W. L. Smith. We are indebted to the membership for their support last year when we were able to raise the dues to a more realistic figure and we are also greatly indebted to those who have subscribed to our Insurance Program. These two sources of revenue have permitted us to have sufficient income to run a good shop.

We are most happy to have acquired, along with our very excellent Executive Secretary, Mr. Patterson, four outstanding young men who have been a great help to this Association and to me. We have in our Communications department, Mr. Duncan Black who has done a great job; we have in our Legal Department Mr. Mack Binion, who has been most faithful and has practically not had time to eat for the last several weeks during the legislative session. In our Education Department we have Mr. Larry Dixon who is doing a very fine job. I am sure that in the near future we are going to be seeing a lot more of Mr. Dixon in our Continuing Education Program. Mr. Tom Rich has also done a great job in the Insurance Program. He does, however, need your help. We need to have every eligible member of this state as a member of our program because the rewards are so great. Not only does our rate save the individual physician, many hundreds of dollars per year, but it brings to the Association needed income. There is an added benefit when a doctor is threatened with a suit, a committee will be happy to come to his aid and investigate the case if that is his desire. Therefore, if you know of a fellow physician in your home town

DR. CAMP

who has not joined our program, please encourage him to join.

On August 28 last, there was a meeting held in Montgomery at the request of Dr. Hudgins of the United States Public Health Service. A group from this Association, along with representatives of the Alabama Hospital Association, and other para-medical specialists came to this meeting. Your president was extremely happy that we presented a united front in requesting that a single PSRO program be started in our State. We realize, of course, that other PSRO's may have to be appointed in the future. We do feel that a single committee would be a realistic beginning, and we can add these other people if it becomes necessary. The PSRO program, of course, is probably the most controversial thing that has happened in medicine in the last 25 years. However, I am something of an optomist and I firmly believe that if we get a reasonable program (I mean by reasonable that the guidelines will be carried out in a reasonable manner), that this program will enable third party payors to receive more services for their dollar than they have in the past. I am confident that the PSRO's

(Continued on Page 221)

No other Malpractice Insurance Coverage fits the Doctors of Alabama so well . . .

The premium cost you pay for the Wausau Special Malpractice Insurance Policy will be based **only** on Alabama loss experience. So you don't pay to help cover losses in such "claims conscious" areas as Florida (Dade County), New York or California. No other insurance company has consented to these terms. Which is just one of the ways you benefit yourself — and the entire Alabama medical community — when you subscribe to this coverage. For information on additional benefits, contact **MASA Insurance Department, 19 South Jackson Street, Montgomery, Alabama 36104. Or call (800) 392-5668 toll free.**

The Woman's Auxiliary

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Child Abuse—
The Battered Child

The problem of the battered child is a phenomenon common to every community. It knows no bounds in relation to economic or educational levels of parents. Cases of abuse are reported from the seemingly well-regulated home and from the obviously disorganized and broken home.

Physical abuse of children is not a new problem. We live in a civilization which is essentially family oriented and child centered; in communities which talk of respecting the rights of children; and in a society which expresses dedication to the concept that the welfare of children is of primary importance. Yet we find that children are still victims of destructive parental behavior. What is more alarming is the fact that with all our vaunted knowhow communities, for the most part, have failed to provide effective counter measures to meet this profound problem.

According to Dr. Vicent J. Fontanta of New York City 50,000 children die and 300,000 are permanently injured physically and emotionally each year from maltreatment by their own parents. In one mortality survey 81 per cent of the children were under four years and 54 per cent were children under two years of age. Since the young children are entirely dependent on care by their parents, the young children who are abused and live, cannot testify against their parents.

Those of us who are responsible for Child Protective Services must look at the problem more objectively. We recognize that destructive parental behavior of this type is usually symptomatic of deeper emotional problems. Rarely is child abuse the product of wanton, willful or deliberate acts of cruelty.

MRS. GRADY

What types of injuries were inflicted on these children? Broken bones were common. Both the internal injuries and the head injuries were responsible for a great many of the fatalities. In this group we find damage to internal organs such as ruptured livers, ruptured spleens and ruptured lungs. Injuries to the head were concussions or skull fractures, with brain hemorrhage and brain damage a frequent diagnosis.

Injuries to abused children from well-to-do homes are usually treated by their family physician and are not reported to the authorities. Children from lower income homes are more often reported by the emer-

gency room physician, by neighbors or relatives. It would seem that the overwhelming attitude in the community is that cases of abused children are seen to be the responsibility of law enforcement. This may be because the community lacks a social-work oriented Child Protective Service, or if it does exist, because the service has not fully interpreted its function to the community. A sound, social-work oriented Child Protective Service is a community's best assurance for the best results.

In July, 1973, the Child Abuse Prevention and Treatment Act, (S. 1191) to establish a National Center on Child Abuse and Neglect in the Office of Child Development, passed the Senate by a vote of 57 to 7. The bill would also establish a National Commission on Child Abuse and Neglect to study and investigate existing laws and programs, the national incidence and causes of child abuse and neglect, and the proper role of the federal government in this area.

Betty Grady

Betty Grady, President

PRESIDENT'S PAGE . . .

(Continued from Page 218)

will cut down on over-utilization of our medical services.

We attended an AMA-sponsored meeting in Atlanta on September 14-15. There were several members of the Board of Censors, as well as Mr. Patterson, who attended this meeting. We hoped that we would come back with some definite guidelines and some direct ideas of what HEW had in mind for us in the future. However, at the time of the conference the clear guidelines we were seeking had not been established.

E. E. Camp

E. E. Camp, M. D.
President

Diarrhea Control and Treatment is Improved

A simple, quick and effective system for control of epidemic diarrhea in the premature newborn nursery has been developed at the University of Texas School at Dallas.

It involves fluorescent antibody screening of all infants, which can be accomplished in 2 to 4 hours. Colonized infants are segregated and treated but the remainder of the nursery continues to function normally. In recent years this procedure has been followed in several epidemics and has proved to be more effective than the previously recommended method of closing the nursery to new admissions, treating the entire nursery population with antibiotics and opening a new "clean" nursery. In every instance the epidemic has been stopped immediately. Once control measures were instituted, not a single additional baby has been infected.

In a double-blind study of 52 infants and children hospitalized for shigellosis, comparison of ampicillin, sulfadiazine and a placebo was made. It was demonstrated conclusively that effective antimicrobial therapy not only eradicated Shigellae promptly but significantly shortened the duration of diarrhea, fever and hospitalization. Prior to this, there was doubt that antibiotics has a significant beneficial effect. It was also shown that *in vitro* and *in vivo* resistance correlated well.

Furazolidone has long been claimed to be effective in shigellosis and several textbooks recommended it; however, controlled studies had never been done. *In vitro*, all Shigellae show great susceptibility to its administration. But, in a treatment study of 19 patients it proved to be no more effective bacteriologically or clinically than placebo. (Principal Investigator: John D. Nelson, M. D.)

around the state

Vital Statistics

NEW MEMBERS

Calhoun County

Ray, Gary Michael, b 44, mc Alabama 70, recip. NBME 71, 721 East 10th Street, Anniston, Alabama 36201. Pd.

Dallas County

Phillips, Gary Eugene, b 38, mc Alabama 66, recip. NBME 68, c/o Medical Center Hospital, Felix Road, Selma, Alabama 36701. Or.

Etowah County

Sanders, Elbert Max, b 43, mc Alabama 67, recip. NBME 69, Medical Arts Building 303 Bay Street Gadsden, Alabama 35901. Path.

Jefferson County

Bergeron, Garry Patrick, Jr., b 41, mc North Carolina 66, recip. North Carolina 73, 1717 11th Avenue, South, Birmingham, Alabama 35205. R.

Champion, Richard Meredith, b 43, mc Alabama 69, sb 70, 1529 North 25th Street Birmingham, Alabama 35234. I.

Choi, Hanseek, b 39, mc Seoul-National University, Seoul, Korea 64, recip. Virginia 73, 1515 6th Avenue, South, Birmingham, Alabama 35233. Pd.

Circle, Alan Lee, b 42, mc Yale 67, recip. NBME 73, 1717 11th Avenue, South, Birmingham, Alabama 35205. R.

Dubovsky, Eva Vitkova, b 33, mc Charles University, Brague, Czechoslovakia 57, recip. North Carolina 73, 619 19th Street, South, Birmingham, Alabama 35233. I.

Grate, Myrle Raymond, Jr., b 42, mc Florida 68, recip. Florida 72, 1919 7th Avenue, South, Birmingham, Alabama 35233. ALR.

Groark, James P., b 31, mc National University of Dublin, Ireland 61, Limited License, University Hospital, 619 19th Street, South, Birmingham, Alabama 35294. Anes.

Haskell, William Mudd Martin, b 46, mc Alabama 72, recip. NBME 73, 1600 9th Avenue, South, Apt. 4-D, Birmingham, Alabama 35233. Anes.

Khare, Santash Kumar, b 39, mc Lucknow Univ. King George's Medical College, Lucknow, India 62, recip. Tennessee 72, 1515 6th Avenue, South, Birmingham, Alabama 35233. Pd.

Latona, Norman Anthony, b 41, mc Alabama 68, sb 69, 1033 22nd Street, South, Birmingham, Alabama 35205. Pd.

Mercer, Charles Wayne, b 35, mc Kentucky 60, recip. Kentucky 73, 1515 6th Avenue South, Birmingham, Alabama 35233. I-C.

Pacifico, Albert Dominick, b 40, mc New Jersey 64, recip. NBME 68, Route 1, box 173-H, Helena, Alabama 35080. C-S.

Rollins, Douglas Lee, Jr., b 40, mc Alabama 66, sb 67, 226 Professional Office Building, 800 Montclair Road, Birmingham, Alabama 35213. S.

Tavakoli, Mehrdad, b 40, mc University Tehran, Tehran, Iran 66, UAB Medical Center, Birmingham, Alabama 35294. Anes.

Waldo, Albert Leon, b 36, mc State Univ. of New York down State Medical Center

(Continued on Page 224)

The Rx that says "Relax"

BUTISOL Sodium provides highly predictable sedative effect: minor dosage adjustments are usually all that's needed to produce the desired degree of sedation. (With 3 dosage forms and 4 strengths to make adjustments easy.)

BUTISOL Sodium offers prompt, smooth, relatively non-cumulative action: begins to work within 30 minutes...yet, because of its intermediate rate of metabolism, generally has neither a "roller-coaster" nor a "hangover" effect.

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BUTISOL Sodium saves your patients money: costs less than half as much as most commonly prescribed sedative tranquilizers.*

These are four good reasons for prescribing BUTISOL Sodium for the many patients who need to have the pace set just a little slower. Its gentle daytime sedative action is often all that's needed to help the usually well-adjusted patient cope with temporary stress.

*Based on surveys of average daily prescription costs.

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Contraindications: Porphyria, sensitivity to barbiturates, or susceptibility to dependence on sedative-hypnotics. **Warning:** May be habit forming. **Precautions:** Exercise caution in: moderate to severe hepatic disease; withdrawal in drug dependence or the taking of excessive doses over a long period, to avoid withdrawal symptoms; elderly or debilitated patients, to avoid possible marked excitement or depression; use with alcohol or other CNS depressants, because of combined effects. **Adverse Reactions:** Drowsiness at daytime sedative dose levels, skin rashes, "hangover" and gastrointestinal disturbances are seldom seen. **Usual Adult Dosage:** For daytime sedation, 15 mg. to 30 mg. t.i.d. or q.i.d. For hypnosis, 50 mg. to 100 mg. **Available as:** Tablets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. per 5 cc. (alcohol 7%). BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg., 30 mg., 50 mg., 100 mg.

McNEIL McNeil Laboratories, Inc., Fort Washington, Pa. 19034

(Continued from Page 222)

62, recip. NBME 72, 1919 7th Avenue, South, Birmingham, Alabama 35233. I.

Weiss, Andrew Bruce, b 39, mc State Univ. of New York down State Medical Center, recip. NBME 73, 619 19th Street, South, Birmingham, Alabama 35233. Or.

Madison County

Finch, Richard Aloysius, b 40, mc Alabama 66, recip. NBME 71, 930 Franklin Street, Suite 209, Huntsville, Alabama 35801. I.

Willice, Robert Leon, b 38, mc Nebraska 64, recip. Nebraska 73, 401 Lowell Drive, Suite 13, Huntsville, Alabama 35801. ObG.

Shelby County

Chandler, (Sullivan) Connie Ann, b 46, mc Alabama 72, recip. NBME 73, P. O. Box 8098, Siluria, Alabama 35144. GP.

MEMBERS DECEASED

Barber County

Berrey, Ruth Robertson, Clayton, Alabama Deceased 7/23/73

Etowah County

Collier, James Robert, Gadsden, Alabama Deceased 8/7/73

Houston County

Thacker, Vincent Joseph, Dothan, Alabama Deceased 8/9/73

Jackson County

Bankston, Ingrum Wesley, Scottsboro, Alabama, Deceased 8/23/73

Jefferson County

Hays, John Howard, Birmingham, Alabama Deceased 7/30/73

CHANGES OF ADDRESS

Calhoun County

Elliott, Mary Catherine, Anniston, to 3385 Convention Street, Baton Rouge, Louisiana 70821.

Elliott, Robert Lange, Jr., Anniston, to 3385 Convention Street, Baton Rouge, Louisiana 70821.

Covington County

Eakes, Timothy Lawson, Jr., Andalusia, to 106 Kaye Circle, Troy, Alabama 36420.

Etowah County

Ford, Henry Grady, present Gadsden to P. O. Box 268, Gadsden, Alabama 35902.

Grimes, Larry Dewey, present Gadsden to 808 South 4th Street, Gadsden, Alabama 35901.

Grimes, Ormond Ralph, present Gadsden to 808 South 4th Street, Gadsden, Alabama 35901.

Hale County

Singleton, Chester Earl, present Greensboro to 703 Tuscaloosa Street, Greensboro, Alabama 36744.

Houston County

Burns, Frank Martin, Dothan, to Medical Arts Building, Alexander City, Alabama 35010.

Jefferson County

Carter, James Roland, Birmingham, to 774 West Drive, Memphis, Tennessee 38112.

Finney, James Owen, Jr., Mississippi, to 2608 10th Avenue South Birmingham, Alabama 35205.

Gutierrez-Mazorra, Juan Francisco, Birmingham, to 022-34-5231 Naval Submarie Medical Center, Naval Submarie, New London, Box 600, Groton, Connecticut 06340.

Hyman, Miles Donald, Birmingham, to 3711 West 230th Street No. 103, Torrance, California 90505.

Johnson, Leslie Donald, present Birmingham to P. O. Box 3387A, Birmingham, Alabama 35208.

Lupton, Charles Hamilton, Jr., present Birmingham to University Station, Birmingham, Alabama 35294.

Moughon, William Sanford, Jr., present Birmingham to 1721 13th Avenue, South Birmingham, Alabama 35205.

(Continued on Page 226)

ABBOTT

i yl®
/YNOL)

Summary

Placidyl (ethchlorvynol) is indicated hypnotic therapy in the management

ions—Drug hypersensitivity and por-

t recommended during the first and ster of pregnancy. Caution patients combined exaggerated effects with iturates, tranquilizers or other CNS Exaggerated effects might result in sion, paralysis of accommodation and nosis. Caution patients concerning tor vehicle, operating machinery, or us operations requiring alertness af- drug. ADMINISTER WITH CAUTION WITH SUICIDAL TENDENCIES AND SCRIBE LARGE QUANTITIES OF THE tment of the dosage of oral anticoag- be necessary when beginning ethchlor-, during therapy, or after stopping drug is not recommended for use in ACIDYL HAS THE POTENTIAL FOR PMENT OF PSYCHOLOGICAL AND EPENDENCE. INSTANCES OF SE- DRAWAL SYMPTOMS, INCLUDING NS AND DELIRIUM CLINICALLY SIM- IOSE SEEN WITH BARBITURATES, REPORTED IN PATIENTS TAKING SES AS LOW AS 1000 MG. PER DAY IOD OF TIME WHEN THE DRUG WAS DISCONTINUED. PROLONGED AD- N OF THE DRUG IS NOT RECOM- diction-prone patients or those who ncrease dosages of the drug on their should be observed for evidence of mptoms which may indicate possible wal or abstinence symptoms. Signs s associated with withdrawal and ab- ude unusual anxiety, tremor, ataxia, peech, memory loss, perceptual dis- ability, agitation and delirium. Other ned signs and symptoms, not neces- withdrawal and abstinence, may in- ia, nausea or vomiting, weakness, eating, muscle twitching and weight discontinuance of Placidyl following erdosage may result in convulsions

-Toxic amblyopia has been reported m continuous use of ethchlorvynol. sual defects have been observed, al- yopia has improved after discontinua- drug. Drug dosage should be limited d debilitated patients to the smallest ount. If pain is present, this drug be given if insomnia persists after olled with analgesics. Caution is ad- scribing the drug for patients who are d with either MAO inhibitors or anti- Transient delirium has been reported bination of Placidyl and amitryptyline. should be reduced if prescribed for eiving MAO inhibitors or antidepres- on should be exercised in patients d hepatic or renal function. Patients unpredictably to barbiturates or alco- exhibit excitement and release of inhi- sociation with such agents, may also way to Placidyl. Rarely, patients may toms suggestive of an unusual sus- the drug; such as prolonged hypnosis, scular weakness, excitement, hysteria, without marked hypotension. Transient ataxia may occur.

actions—Hypotension, nausea or vom- upset, aftertaste, blurring of vision, cial numbness, and allergic reaction rticaria have been reported following inistration. Mild "hangover" and symp- d excitation have occurred in some re have been rare reports of cholestatic urring in patients taking ethchlorvynol. s of thrombocytopenia have been re- tients receiving ethchlorvynol. 306433

Give us his nights.

Prescribe Placidyl. Chances are, we'll give him a good night's sleep.

Insomnia often accompanies a cardiovascular episode. How many nights does he lie awake, awaiting exactly what he fears most . . . another stroke, another heart attack? He doesn't need fear. He needs sleep.

When sleep is synonymous with therapy, remember . . . Placidyl is synonymous with sleep. It has been for over 17 years.

If time is the criterion to inspire your confidence . . . you can rest assured with Placidyl.

Prescribed by physicians for over 17 years.

Placidyl® CIV

(ETHCHLORVYNOL CAPSULES, 500 or 750 mg.)

(Continued from Page 224)

Pittman, James Allen, Jr., present Birmingham to 5 Ridge Drive, Birmingham, Alabama 35213.

Reves, Joseph Gerald, Birmingham to 1907 Wooded Way, Adelphi, Maryland

Shadburn, William Burton, Ft. Worth, Texas, to Suite 207, 750 Washington Avenue, Montgomery, Alabama 36104.

Younes, Henry Joseph, present Birmingham to 2136 E. Lyngate Road, Birmingham, Alabama 35216.

Lauderdale County

Dunn, Milton Calvin, present Florence to 2132 Bower Drive, Florence, Alabama 35630.

Marion County

Woddail, Joseph Doyle, Hamilton, to 74 Woodland Hills, Tuscaloosa, Alabama 35401.

Mobile County

Eichold, Samuel, II, present Mobile to 165 South Georgia Avenue, Mobile, Alabama 36604.

Montgomery County

Thigpen, Francis Marion, present Montgomery to 3706 Berkley Drive, Montgomery, Alabama 36111.

Woodfin, Mose Clarke, Jr., Dyersburg, Tennessee, to Tullahoma, Tennessee 37388.

St. Clair County

Grant, Larry Wells, Pell City to The University of Utah, Medical Center, 50 North Medical Drive, Salt Lake City, Utah 84112.

Tallapoosa County

Johnson, Roderick Gray, Alexander City, to 601 Ayers Street, Anniston, Alabama 36201.

Tuscaloosa County

Cochrane, Robert Hunt, Jr., Greensboro, to 1606 Alaca Place, Tuscaloosa, Alabama 35401.

(Continued on Page 231)

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512

When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

lies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended.

Healing nicely but it still HURTS

EMPIRIN COMPOUND c̄ CODEINE

#3, codeine phosphate* (32.4 mg.) gr
#4, codeine phosphate* (64.8 mg.) g

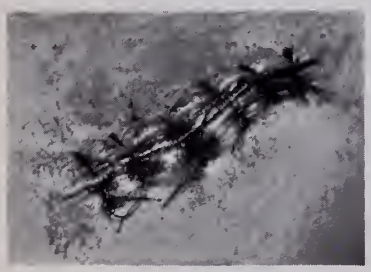
HERE

Burns

When parenteral analgesia is no longer required, Empirin Compound with Codeine usually provides the relief needed.

HERE

Sutures



Empirin Compound with Codeine is effective for visceral as well as soft tissue pain—provides an antitussive bonus in addition to its prompt, predictable analgesia.

C III prescribing convenience: up to 5 refills in 6 months, at your discretion (unless restricted by state law); by telephone order in many states.

Empirin Compound with Codeine **No. 3,** codeine phosphate* 32.4 mg. (gr. ½); **No. 4,** codeine phosphate* 64.8 mg. (gr. 1). *Warning—may be habit-forming. Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

adjunctive therapy for wound debridement

HELPS TO REMOVE:

- Necrotic Tissue and Associated Odor

HELPS PREPARE WOUND FOR:

- Granulation/Healing
- Granulation/Grafting

CLEANSE WOUND
Thoroughly cleanse and irrigate wound area with sodium chloride or water solutions. Wound MUST be cleansed of antiseptics or heavy-metal antibacterials.

THOROUGHLY MOISTEN
Thoroughly moisten wound area either through tubbing, showering, or wet soaks (e.g., sodium chloride or water solutions).

APPLY ENZYME
Apply a layer of TRAVASE Ointment. Assure intimate contact with necrotic tissue and complete wound coverage.

APPLY MOIST DRESSING
Apply loose moist dressings (most important with dry leathery eschar).

CHANGE DRESSINGS
When changing dressing, gently wipe away the dissolved material. Repeat the procedure, including application of TRAVASE Ointment, 3 to 4 times per day for best results.

Travase® Ointment
brand of Sutilains

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC
Deerfield, Illinois 60015

Please see next page for prescribing information.

Travase® Ointment brand of Sutilains

ulcers

TERRY V. CARLE, M.D., CLINICAL INSTRUCTOR, DEPT. OF PHYS. MED. & REHAB., CRAIG REHABILITATION HOSPITAL, UNIVERSITY OF COLORADO

Before treatment, necrotic matter coated the inner surfaces of this decubitus ulcer.

After nine days of TRAVASE therapy, debridement is nearly complete and granulation evident.

burns

DALE B. DUBIN, M.D., DIPLOMATE, AMERICAN BOARD OF PLASTIC SURGERY, TAMPA, FLORIDA

Before treatment . . .

48 hours following treatment with TRAVASE Ointment on right hand; left hand is control.

Travase® Ointment

(brand of Sutilains)

Indications: For wound debridement, TRAVASE Ointment is indicated as an adjunct to established methods of wound care for biochemical debridement of the following lesions:

- Second and third degree burns,
- Decubitus ulcers,
- Incisional, traumatic, and pyogenic wounds,
- Ulcers secondary to peripheral vascular disease.

Contraindications: Application of TRAVASE Ointment is contraindicated in the following conditions:

- Wounds communicating with major body cavities,
- Wounds containing exposed major nerves or nervous tissue,
- Fungating neoplastic ulcers,
- Wounds in women of child-bearing potential—because of lack of laboratory evidence of effects of TRAVASE upon the developing fetus.

Warning: Do not permit TRAVASE Ointment to come into contact with the eyes. If contact is made, immediately rinse with copious amounts of water, preferably sterile.

Precautions: A moist environment is essential to optimal activity of the enzyme. Enzyme activity may also be impaired by certain agents (see package insert). Although there have been no reports of systemic allergic reaction in humans, studies have shown that there may be an antibody response in humans to absorbed enzyme material.

Adverse Reactions: Consist of mild, transient pain, paresthesias, bleeding and transient dermatitis. Pain usually can be controlled by administration of mild analgesics. Side effects severe enough to warrant discontinuation of therapy occasionally have occurred.

If bleeding or dermatitis occurs as a result of the application of TRAVASE Ointment, therapy should be discontinued. No systemic toxicity has been observed as a result of the topical application of TRAVASE Ointment.

DOSAGE AND ADMINISTRATION: STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FOR EFFECTIVE RESULTS OF TREATMENT:

1. Thoroughly cleanse and irrigate wound area with sodium chloride or water solutions. Wound MUST be cleansed of antiseptics or heavy-metal antibacterials which may denature enzyme or alter substrate characteristics (e.g., hexachlorophene, silver nitrate, benzalkonium chloride, nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbing, showering, or wet soaks (e.g. sodium chloride or water solutions).
3. Apply TRAVASE Ointment in a thin layer assuring intimate contact with necrotic tissue and complete wound coverage extending ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for best results.

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC
Deerfield, Illinois 60015

(Continued from Page 226)

Santina, Henry D., present Tuscaloosa to P. O. Drawer "S", East Side Station, Tuscaloosa, Alabama 35401.

NEW TELEPHONE NUMBERS

Bergeron, Garry P., Jr., Jefferson	933-8122
Champion, Richard M., Jefferson	252-6161
Chandler, (Sullivan), Connie A	663-2691
Choi, Hanscek, Jefferson	933-9211
Circle, Alan Lee, Jefferson	933-8122
Cole, George W., Jefferson	934-4713
Dubovsky, Eva V., Jefferson	934-2121
Finch, Richard A., Madison	533-4626
Grate, Myrle R., Jr., Jefferson	934-4502
Groark, James P., Jefferson	934-4696
Haskell, William M. M., Jefferson	934-4696
Khare, Santosh K., Jefferson	933-1820
Latona, Norman A., Jefferson	251-4141
Mercer, Charles W., Jefferson	933-1820
Pacifico, Albert D., Jefferson	934-2344
Phillips, Gary E., Dallas	875-2363
Ray, Gary M., Calhoun	237-1737
Rollins, Douglas L., Jr., Jefferson	592-8904
Sanders, Elbert M., Etowah	543-2990
Tavakoli, Mehrdad, Jefferson	934-4696
Waldo, Albert L., Jefferson	934-4621
Weiss, Andrew B., Jefferson	934-4667
Willice, Robert L., Madison	539-0635
Olsen, Frank B., Jefferson	933-9211

MEMBERS REINSTATED

Jefferson County

Cole, George William, b 33, mc Florida 58, recip. Florida 66, 1919 7th Avenue, South, Birmingham, Alabama 35233. I.

Olsen, Frank Bernard, b 12, mc Colorado 37, recip. Colorado 68, 1515 6th Avenue South, Birmingham, Alabama 35233. GP.

CHANGE OF SPECIALTY

Jefferson County

Finney, James Owen, Jr., 2608 10th Avenue South, Birmingham, Alabama 35205. I,C.

MEMBERS REMOVED

Etowah County

Spencer, Thomas, Gadsden, Alabama 35901 Transfer to Nonmember.

CORRECTIONS

Jefferson County

Bell, Palmer Henderson, change Zip Code to 35226.

Miller, James A., change Zip Code to 35204.

BOOK REVIEW

Advances In Forensic and Clinical Toxicology by A. S. Curry, Central Research Establishment, Aldermaston, England, provides an introduction to recent literature on this rapidly expanding subject. In this new edition, 1500 references are presented in a concise, coherent format, based on information from authentic and highly regarded sources. The quoted work included in this book provides the reader with an essential starting point for further examination of literature on this subject. The index provides a handy reference for the toxicologist, clinical chemist, or interested reader.

Although this selection is meant to be used as a reference book, it also pinpoints many research areas and stresses problems in need of special attention. The mass of material presented here gives a critical evaluation of areas in which the author excels. The author provides an examination of topics such as Ethanol, Carbon Monoxide, and other gases and volatile liquids. Vital information on Cannabis, LSD, Methaqualone, Barbiturates, Diphenylhydantoin, and Drugs of Abuse is also included.

The Seven Deadly Sins are: 1. Politics without principle. 2. Wealth without work. 3. Pleasure without conscience. 4. Knowledge without character. 5. Business without morality. 6. Science without humanity. 7. Worship without sacrifice.

—*E. Stanley Jones*

Recommendations† on Combination Live Virus Vaccines

American Academy of Pediatrics

Committee on Infectious Diseases

In the September 15, 1971 *AAP Newsletter* sent to Academy members, the Committee on Infectious Diseases of the American Academy of Pediatrics stated its recommendations on the use of combination live virus vaccines. After a careful review of available data, the committee concluded that:

- "This information indicates that the products are both safe and effective when used as directed."
- The vaccine "...can, therefore, be recommended with the obvious advantages of reduction in the number of injections for any given child and a concomitant decrease in the required visits to a physician's office or clinic."

†For complete text of both recommendations see your MSD representative or write to Professional Service Dept., Merck Sharp & Dohme, West Point, Pa. 19486.

United States Public Health Servic

Advisory Committee on Immunization Practices

In the April 24, 1971 issue of *Morbidi and Mortality Weekly Report*, the Advi ory Committee on Immunization Pra tices of the United States Public Heal Service presented recommendations c the use of combination live virus vaccine The committee stated that:

- "Data indicate that antibody respons to each component of these combinatic vaccines is comparable with antibody r sponse to the individual vaccines give separately.
- "There is no evidence that a verse reactions to the combine products occur more fr quently or are more seve than known reactions to t individual vaccines (see pe tinent ACIP recommend tions).
- "The obvious convenien of giving already selecte antigens in combined for should encourage consider tion of using these produc when appropriate."

M-M-R*

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

M-M-R, given in a single injection, fits easily into your routine immunization program for well babies.

Given at age 12 months, M-M-R provides for vaccination early in life against measles, mumps, and rubella.

MSD suggested immunization schedule for well babies	
Age	**Vaccine(s)**
2 months	DPT (diphtheria-pertussis-tetanus) Oral poliomyelitis vaccine (triple)
3 months	DPT[1]
4 months	DPT Oral poliomyelitis vaccine (triple)
6 months	Oral poliomyelitis vaccine (triple)
12 MONTHS	**M-M-R (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE, MSD)**

1. This vaccination may be given at 3 months, 5 months, or at 6 months, depending on your preference or on the condition of the child.

Since vaccination with a live virus vaccine may depress the results of a tuberculin test for four weeks or longer, the test and the vaccine should not be given during the same office visit.

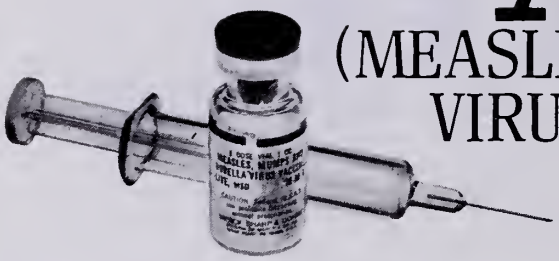
*Trademark of Merck & Co., Inc.

For a brief summary of prescribing information, please see following page.

M-M-R

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials



No untoward reactions peculiar to the combination vaccine (M-M-R) have been reported.

Moderate fever (101-102.9 F) occurs occasionally. High fever (over 103 F) occurs less commonly. On rare occasions, children who develop fever may exhibit febrile convulsions. Rash (usually minimal and without generalized distribution) may occur infrequently.

Since clinical experience with measles, mumps, and rubella virus vaccines given individually indicates that very rarely encephalitis and other nervous system reactions have occurred, such reactions may also occur with M-M-R. A cause and effect relationship, however, has not been established.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Must not be given to women who are pregnant or who might become pregnant within three months following vaccination.

Contraindications: Pregnancy or possibility of pregnancy within three months following vaccination; infants less than one year old; sensitivity to chicken or duck, chicken or duck eggs or feathers, or neomycin; any febrile respiratory illness or other active febrile infection; active untreated tuberculosis; therapy with ACTH, corticosteroids, irradiation, alkylating agents, or antimetabolites; blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems; gamma globulin deficiency, i.e., agammaglobulinemia, hypogammaglobulinemia, and dysgammaglobulinemia.

Precautions: Administer subcutaneously; do not give intravenously. Epinephrine should be available for immediate use should an anaphylactoid reaction occur. Should not be given less than one month before or after immunization with other *live* virus vaccines; vaccination should be deferred for at least six weeks following blood transfusions or administration of more than 0.02 cc immune serum globulin (human) per pound of body weight, or human plasma.

Due caution should be employed in children with a history of febrile convulsions, cerebral injury, or any other condition in which stress due to fever should be avoided. The physician should be alert to the temperature elevation which may occur after vaccination.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Attenuated live virus measles and mumps vaccines, given separately, may temporarily depress tuberculin skin sensitivity; therefore, if a tuberculin test is to be done, it should be scheduled before vaccination, to avoid the possibility of a false negative response.

Before reconstitution, refrigerate vaccine at 2–8 C (35.6–46.4 F) and *protect from light*. Use only diluent supplied to reconstitute vaccine. If not used immediately, return reconstituted vaccine to refrigerator at 2–8 C (35.6–46.4 F), and discard after eight hours.

Adverse Reactions: Fever, rash; mild local reactio such as erythema, induration, tenderness, region lymphadenopathy; parotitis; thrombocytopenia a purpura; allergic reactions such as urticaria; arthrit arthralgia, and polyneuritis.

Occasionally, moderate fever (101–102.9 F); less co monly, high fever (above 103 F); rarely, febrile co vulsions.

Encephalitis and other nervous system reactions th have occurred very rarely with the individual vaccin may also occur with the combined vaccine.

Transient arthritis, arthralgia, and polyneuritis a features of natural rubella and vary in frequency a severity with age and sex, being greatest in adult f males and least in prepubertal children. Such rea tions have been reported with live attenuated rubel virus vaccines. Symptoms relating to joints (pai swelling, stiffness, etc.) and to peripheral nerves (pai numbness, tingling, etc.) occurring within appro mately two months after immunization should be co sidered as possibly vaccine related. Symptoms ha generally been mild and of no more than three da duration. The incidence in prepubertal children wou appear to be less than 1% for reactions that wou interfere with normal activity or necessitate medic attention.

How Supplied: Single-dose vials of lyophilized va cine, containing when reconstituted not less th 1,000 $TCID_{50}$ (tissue culture infectious doses) measles virus vaccine, live, attenuated, 5,000 $TCID_{50}$ mumps virus vaccine, live, and 1,000 $TCID_{50}$ of rubel virus vaccine, live, expressed in terms of the assign titer of the NIH Reference Measles, Mumps, and R bella Viruses, and approximately 25 mcg neomyc with a disposable syringe containing diluent and fitt with a 25-gauge, ⅝" needle. Also in boxes of 10 sing dose vials nested in a pop-out tray with a separate box of 10 diluent-containing syringes.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP DOHME

Space Age Switches Automate Hospital Room

The NASA-Marshall Space Flight Center and the Huntsville (Ala.) Hospital have developed, adapted and tested an electromechanical system that enables severely handicapped or almost totally paralyzed persons to perform many simple tasks for themselves.

The system designed for and installed in a hospital room permits the remote control communications systems and appliances for comfort and recreation of the bedridden patient.

The unit enables the patient to dial and answer telephones; turn pages of books; open and close curtains; advise a nurse at a remote station of his needs; set temperature of electric blankets; operate motorized beds; activate and tune radios, televisions and intercoms; and turn on and off a variety of appliances such as lights, buzzers and electric fans.

This environmental control system was first conceived by engineers at the Huntsville Hospital and the Marshall Space Flight Center using the "sight switch" developed under sponsorship of MSFC scientists for possible emergency aid to astronauts in space.

The sight switch is really two switches mounted on a pair of eye-glass frames—on the ear pieces, near the eyes. Each switch has a small infrared source and a sensor which detects the difference in reflectivity between the iris and the white of the eye. To activate the switch, the patient simply looks upward and outward at the sensor near the corner of his eye.

The switches, once set for a particular individual, are not operated by blinking or normal eye movements. It takes pronounced motion of the eye to trip the switch.

Other devices provided for the experiment included a foot-operated switch, a panel switch, a breath switch and a pneumatic switch. The foot-operated switch is so sensitive that only a touch is needed to activate it.

A patient retaining only the most limited body movement can use the foot switch or a panel switch consisting of two panels, one on each side of the patient's head. He has only to roll his head to one side or the other to operate the device.

The pneumatic switch consists of two air bags, one behind each ear. He rolls his head to one side or the other, depressing a bag against the pillow to operate the switch.

The hospital provided a number of small servo devices which were attached to appliances, radios, light switches and other controls to translate the signals from the patient into mechanical action.

This large variety of switches means that

(Continued on Page 238)

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia, malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

Chewable
Tablets 500 mg
Mintezol®
HIABENDAZOLE | MSD)

o easy to take
veryone in the family
an keep to the
egimen you prescribe

ude: fever, facial flush, chills, conjunctival injection,
ioedema, anaphylaxis, skin rashes, erythema multiforme
luding Stevens-Johnson syndrome), and lymphadenopathy.
plied: Chewable tablets, containing 500 mg thiabendazole,
oxes of 36, strip packaged, individually foil wrapped;
pension, containing 500 mg thiabendazole per 5 ml, in
tles of 120 ml.

*more detailed information, consult your MSD representa-
or see full prescribing information. Merck Sharp &
me, Division of Merck & Co., INC., West Point, Pa. 19486*

MSD
MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

(Continued from Page 235)

patients with varying degrees of disability —including a quadriplegic with total immobility—can operate the system.

NASA's purpose in sponsoring this work was to show that a number of switches and other devices, developed in large part through space research, could be incorporated into a usable, reasonably priced form that could be used in homes, nursing homes, extended care centers and hospitals to aid the severly handicapped.

Most patients using the equipment at Huntsville Hospital have been able to operate the basic subsystems with accuracy within one hour of practice and have mastered fine tuning operations such as dialing the telephone within a few days.

Wassie I. Griffin, Huntsville Hospital Administrator, said, "The increased freedom this system has provided patients is shown in the great boost to their morale. The sense of independence created for many patients has renewed their interests in their immediate environment, and patients recently paralyzed by injuries have faced less traumatic adjustment periods since they were not totally dependent on others from the outset of the medical care."

Sener Sancar, principal investigator for the Huntsville Hospital said that "one of the most attractive features of this approach to patient care for severely handicapped is its cost effectiveness, particularly in terms of the nursing staff. By permitting the patient to do many small things for himself throughout the day, the nurse is able to devote additional time to the more strictly clinical duties in the hospital."

The Southwest Research Institute, San Antonio, Texas, provided several of the elements tested, and the University of Alabama, Huntsville campus, served as consultant to Huntsville Hospital in defining the concept.

The project was managed through the Marshall Space Flight Center Technology Utilization Office, headed by James W. Wiggins, with Juan Pizarro, II, as the project manager.

Welcoming The Newborn Baby

A glimpse of what happens to the newborn between its birth and its first birthday is provided, in extremely simple terms and heartwarming art work, by author Erma Brenner and illustrator Symeon Shimin in *A New Baby! A New Life!* (McGraw-Hill, soft cover $4.95).

"Out of her own experience as a mother and a teacher, Erma Brenner knows well the happy moments, as well as the hardships, that come during the special time when a baby enters and changes the adult's life," writes Marianne Kris, M. D., of Yale University's Child Study Center, in a Foreword. "I feel this needed book will help to show mothers and fathers what awaits them in their living with their baby and in that way make the first year of parenthood a little bit easier."

Banana-Flavored Donnagel®-PG

The civilized solution to the age-old problem of diarrhea.

The evolution of Donnagel®-PG:

Kaolin and pectin to provide demulcent-detoxicant effects.

Belladonna alkaloids for antispasmodic benefits.

Powdered opium, the therapeutic equivalent of paregoric—without the unpleasant taste—to promote the production of formed stools and lessen the urge.

And a delicious banana flavor good enough for the most discriminating tastes.

All together in the evolutionary discovery that's the best-tasting way yet to treat acute, non-specific diarrheas.

Donnagel®-PG

Donnagel with paregoric equivalent.
Each 30cc. contains:

Kaolin	6.0 g.
Pectin	142.8 mg.
Hyoscyamine sulfate	0.1037 mg.
Atropine sulfate	0.0194 mg.
Hyoscine hydrobromide	0.0065 mg.
Powdered opium, USP (equivalent to paregoric 6 ml.) (warning: may be habit forming)	24.0 mg.
Sodium benzoate (preservative)	60.0 mg.

Alcohol, 5%

℞ Available on oral prescription or without prescription in compliance with applicable state and local law.

A·H·ROBINS

Chimp courtesy of Ringling Brothers & Barnum & Bailey Combined Shows, Inc

A. H. Robins Company, Richmond, Virginia 23220

WINTE
COUGH
2102
Robitussin
Cough Calmers

CLEAR THE TRACT WITH THE ROBITUSSIN® LINE

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

ROBITUSSIN®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Alcohol, 3.5%

For unproductive allergic coughs

ROBITUSSIN A-C® C

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Codeine phosphate ..... 10.0 mg.
(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hr. cough control

ROBITUSSIN-DM®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Dextromethorphan hydrobromide ..... 15 mg.
Alcohol, 1.4%

Robitussin-DM in solid form for "coughs on the go"

COUGH CALMERS®

Each Cough Calmer contains:
Glyceryl guaiacolate ..... 50 mg.
Dextromethorphan hydrobromide ..... 7.5 mg.

Relieves cough, clears sinuses and nasal passages—keeps them "drip-dry" but not bone dry

ROBITUSSIN-PE®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Phenylephrine hydrochloride ..... 10 mg.
Alcohol, 1.4%

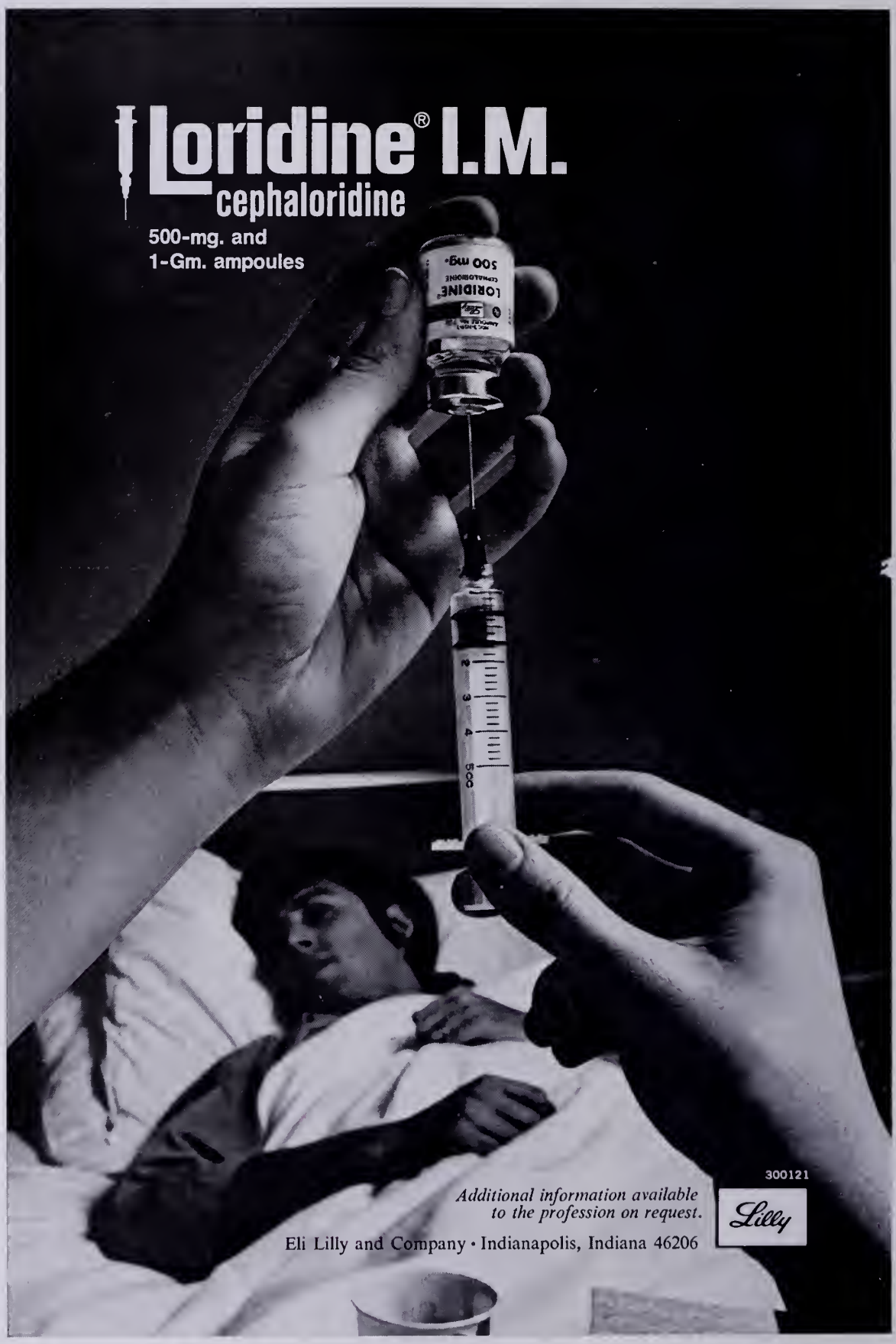
ect the Robitussin® Car-Tract" Formulation Treats Your Patient's vidual Coughing eds:

	Expectorant-Demulcent	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ITUSSIN®	●					●
ITUSSIN A-C®	●	●	●			
ITUSSIN-DM®	●	●		●		●
ITUSSIN-PE®	●				●	●
GH CALMERS®	■	■		■		■

his handy chart as a guide in selecting the formula that provides the benefits you want for your patient.

A·H·ROBINS

A. H. Robins Company, Richmond, Virginia 23220


Loridine® I.M.
cephaloridine
500-mg. and
1-Gm. ampoules
LORIDINE
500 mg.
300121
Additional information available
to the profession on request.
Lilly
Eli Lilly and Company • Indianapolis, Indiana 46206

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Published Under the Auspices of the Board of Censors

Volume 43 October, 1973 Number 4

Acute Laryngeal Trauma

Robert F. Tarpy, M. D.

and

Julius N. Hicks, M. D.
Clinical Professor
Birmingham, Alabama

The graceful contour of the human neck contains vital structures in the life support systems of the human body. This region has long been the target of the warrior in the arena and more recently the object of injury in the concrete battlefield of the expressways. Clearly, moving vehicle accidents have become the major etiologic factor in blunt laryngeal trauma.

No current statistics give information as to the incidence of laryngeal injury as related to vehicular causes, but several capable investigators including: Fitz-Hugh,[1] Ogura and Powers,[2] Harris and Tobin,[3] and Olson, et al[4] attest to the rise in this group of auto injuries. Pennington points out that in the early decades of the 20th century, the most common cause of laryngeal stenosis was diphtheria, whereas in the second half of this century high speed transportation is responsible for the majority of cases.[5]

The objectives of this paper are the following: first, to review the anatomy of the laryngotracheal complex as it applies to acute injury; second, to describe the biodynamics of injury in this area in automobile collisions; third, to review the diagnosis and treatment of acute laryngeal injury; and finally, to demonstrate these management principles with a case study.

ANATOMICAL FACTORS IN LARYNGEAL TRAUMA

Externally, the laryngotracheal area occupies that space from the inferior rim of the mandible to the suprasternal notch. Using the level of the true vocal cords, the glottis, as a reference point, this area can be subdivided into the supraglottic, glottic and subglottic regions (Figure 1).

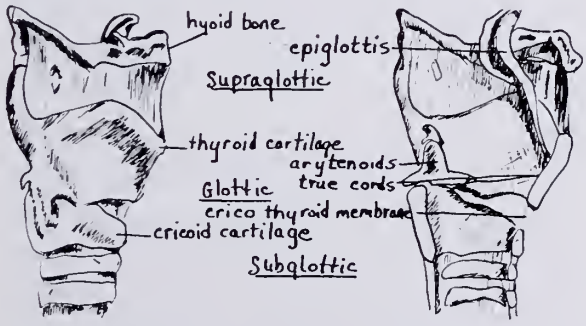

Figure 1—The basic anatomy of the larynx showing the three major regions: supraglottic, glottic and subglottic, along with pertinent structures within these regions.

The structures in the supraglottic and glottic areas are the epiglottis, the arytenoid and thyroid cartilages and the false and

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true vocal cords. The wings of the thyroid cartilage rest on the anterior aspects of the cricoid cartilages, the cricoid acting as a support to hold the thyroid alae apart.[6] The thyroid cartilage in conjunction with the arytenoids posteriorly is the major structure holding and suspending all of the glottic and supraglottic structures. The epiglottis is attached in the midline to the apex of the thyroid notch or Adam's apple. Between the epiglottis and the hyoid bone lies an area of dense areolar tissue known as the pre-epiglottic space, which is capable of remarkable edema following trauma.[7] The aryepiglottic fold connects the lateral border of the epiglottis with the eminence of the arytenoid cartilage. The false vocal cords are attached anteriorly to the epiglottis and posteriorly blend into the mucosa over the arytenoids. The true vocal cords are immediately below the false cords and meet anteriorly to form the V-shaped anterior commissure and posteriorly are attached to the arytenoid cartilages.

The subglottic larynx extends from the undersurface of the true vocal cords to the first tracheal ring. The mucosa of this area rests on a loose areolar tissue framework, abundant in lymphatics and arterial-venous networks. This areolar tissue is of considerable importance in subglottic inflammatory conditions.[8] The Cricoid cartilage, the only complete tracheal ring, forms the major supportive structure of the subglottic space.

The epithelial covering of the larynx is either non-keratinizing squamous epithelium or pseudostratified ciliated columnar epithelium. The blood supply is received through laryngeal branches of the superior and inferior thyroid arteries, and the entire laryngeal nerve supply is from the vagus. Sensory innervation is from the internal branch of the superior laryngeal nerve and motor innervation is predominantly through the recurrent laryngeal nerves.

BIODYNAMICS OF EXTERNAL LARYNGEAL INJURY

The mechanisms of injury in the usual type of automobile collision are demonstrated (Figure 2). The cycle of injury is

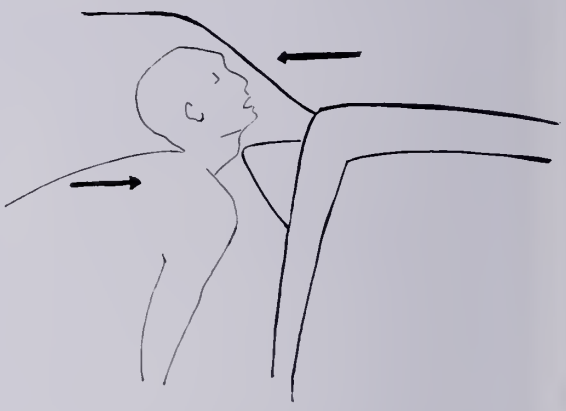

Figure 2—The biodynamics of injury in automobile collisions.

set in motion when the vehicle strikes an object in the environment. The driver is the most frequent victim and the steering wheel or dashboard are the objects most commonly struck.[9] On impact the passenger traveling at the pre-impact speed of the vehicle is thrown forward with the head and neck in the hyperextended position. With the mandible raised, the upper airway is in a completely vulnerable position.

In the typical injury at the transglottic level the anteroposterior force strikes the thyroid shield and crushes it against the cervical vertebrae. With recoiling of the cartilage, separation of the thyroarytenoid musculature occurs resulting in tears of the true and false vocal cords, ventricles and aryepiglottic folds, along with separation of these structures from the anterior commissure.[10] A supraglottic injury results in herniation of the dense areolar and adipose tissue of the pre-epiglottic space into the laryngeal lumen, along with posterior displacement of the base of the epiglottis.[11] Subglottic injuries produce cricoid fractures as well as laryngotracheal separation with bilateral recurrent laryngeal nerve injury.

From the previous discussion, it should be clear that laryngeal fractures of all types

can be significantly reduced by wearing seat belts and particularly by utilizing the shoulder harness.

SYMPTOMS AND DIAGNOSIS

Blunt laryngeal injuries are similar to blunt injuries of the chest and abdomen in that the overlying skin may cloak severe internal damage. Such injuries demand a high index of suspicion and thorough knowledge of the signs and symptoms involved.

The clinical picture associated with acute laryngeal trauma covers a broad spectrum and depends on the duration and extent of injury. Olson points out that there is no high correlation between the signs and symptoms and the severity on the ultimate results.[13] At one extreme of the patient dilemma one may see progressive respiratory stridor, cyanosis, gross hemoptysis and aphonia, while at the opposite extreme one observes tranquil respirations, slight hoarseness, pain on swallowing and no hemoptysis. Cervical ecchymosis, flattening of the thyroid notch, loss of the cricoid prominence and subcutaneous emphysema are common physical findings.

After emergency measures have been instituted, diagnostic studies should be performed. Radiographic work-up should include a chest film to observe for pulmonary and mediastinal injury, cervical spine views to rule out cervical fractures and soft tissue cervical views to delineate the laryngeal structures. Laryngograms (contrast dye studies) are helpful in pinpointing violations of the intact mucosa with extravasation of dye into the neck. Tomography is helpful in assessing the degree of airway restriction, the extent of true and false cord swelling and for evaluating the subglottic space.[14]

Endoscopic evaluation should begin with a good mirrow examination, if possible. The location of the epiglottis, arytenoids and vocal apparatus, along with the integrity of the laryngeal mucosa can be immediately determined. Direct laryngoscopy is an absolute diagnostic measure but should be done only with the guarantee of an intact upper airway. This procedure is frequently done after tracheotomy to avoid converting partial to complete airway obstruction. Bronchoscopy may be indicated following severe subglottic injury with involvement of the tracheobronchial tree.

TREATMENT

The goal of treatment in acute laryngeal injury is adequate airway preservation, prevention of infection and restoration of structures to their proper anatomic and functional relationships.[15] As in most instances of traumatic injury, the approach may be either conservative or operative.

Individuals receiving conservative treatment, usually present with a relatively benign clinical picture. As mentioned earlier, one may complain of mild hoarseness and discomfort, demonstrate no airway compromise or physical signs of laryngeal disruption and have no roentgenologic or endoscopic evidence of impairment. In these cases, treatment should include close observation for 24 hours, bedrest, voice rest and humidification. A tracheotomy set should be available at the bedside.

Operative treatment of acute laryngeal injuries is indicated in the severely injured patient with disruption of the normal laryngotracheal configuration. Miles has pointed out that open exploration is determined by three diagnostic clues: (1) the need for early tracheostomy; (2) bare cartilage visible in the lumen of the larynx; and (3) the presence of a cricoid fracture.[16]

Of prime importance in approaching a surgical repair of this type of injury is realizing the need for an intact, properly shaped skeletal framework and also the need for a completely epithelialized lining of the laryngotracheal cavity. Tracheotomy should preclude open intervention, with placement of the tracheotomy tube low in the neck.

The approach to the larynx is generally through a transverse cervical incision mid-

way between the hyoid and cricoid cartilages, with elevation of the skin flaps, separation of the strap muscles and division of the thyroid cartilage in the midline. This gives excellent exposure of the interior of the larynx. At this time the binocular operating microscope may be used under six power magnification to facilitate examination and repair tears in the mucosa which are closed with 4-0 chromic suture, placed so that their knots do not enter the laryngeal lumen, predisposing to granuloma formation. Displaced cartilage and ligaments should be reapproximated to their normal position with suture attachment to extralaryngeal structures if needed for stabilization.

Splinting of the lumen to allow for fibrous union between cartilaginous fragments and to hold the shape of the lumen is felt to be necessary by most investigators.[17] The types of splints used include a vast array of materials such as teflon, silastic tubing, acrylic molds, silicone sponge, sponge rubber placed in finger cots and others. A splint must be firm enough for support, but soft enough to prevent pressure necrosis of the underlying mucosa. Harris has achieved much success using sponge rubber conformed to the size and shape of the larynx and placed in the finger of a rubber glove of desired size. The upper end is tied with a piece of silk.[18] The splint is then transfixed to a suitable stable cartilage with No. 24 gauge stainless steel wire passed through a No. 18 gauge lumbar puncture needle (Figure 3). Split thickness and mucosal skin grafts may be placed about the endolaryngeal stint when mucosal loss is great and bare cartilage left uncovered.

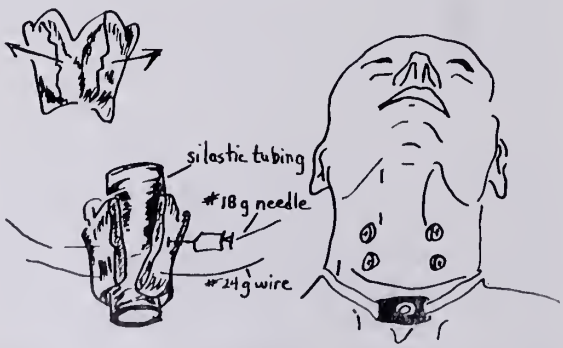

Figure 3—A No. 20 pediatric silastic chest tube used as a stint within the fractured larynx. This stint is secured to the outside of the neck with stainless steel wire.

Most authors now recommend splinting for only three-to-four weeks, rather than several months, and controlled animal studies show no improved results when splinting is done for nine weeks as opposed to three weeks.[19] From animal studies evidence exists that steroids are useful in preventing granulation tissue formation in the three-to-five day period before definitive treatment. Treatment should be started within 24 hours after injury and continued for three weeks post-splint removal.[20] Oral zinc sulfate given three times a day has been advocated, since zinc deficiency after severe injury may cause delayed healing.[21] Antibiotics are also recommended with laryngeal trauma.

Optimum assessment of the larynx is not obtainable in the severely fractured larynx immediately after injury. A waiting period of three-to-five days allows edema and hematoma formation to subside and is necessary for an ideal evaluation. Too, maximum laryngeal edema probably does not occur until six hours post-injury and if tracheotomy has not been required by this time, then it likely can be deferred.

CASE PRESENTATION

B. H. This 18-year-old student was involved in an automobile accident on 10 July, 1972. The patient struck the dashboard and front windshield, sustaining severe facial lacerations, a nasal fracture and blunt trauma to the anterior neck (Figure 4). The patient was seen approximately 30 minutes following injury and complained of painful swallowing, a sticky sensation in the throat and pain over the laryngotracheal complex. Associated physical signs were hemoptysis, dysphonia and difficulty handling oral secretions. Mirror examination of the larynx revealed a lateral pharyngeal wall laceration on the left, with a tear in

Figure 4—An eighteen year old student sustaining severe blunt trauma to the face and anterior neck.

the left glosso-epiglottic fold. There was posterior displacement of the epiglottis and edema of the true and false vocal cords. Except for facial lacerations, the physical examination was normal and the patient was hemodynamically stable.

Chest films and cervical spine views were normal. Soft tissue laterals of the neck revealed much swelling of the supraglottic and transglottic larynx with no definite fractures seen. A nasal fracture was noted on the facial views.

The patient underwent primary closure of the facial lacerations and a low tracheotomy to establish an adequate airway. Direct laryngoscopy was deferred due to the marked edema and distortion of the laryngeal architecture. The patient was placed on careful monitoring of vital signs and neurologic signs, and given intravenous fluids and antibiotics. Tomograms of the larynx were obtained with no additional information realized.

Four days following the initial injury, the patient was taken to surgery for direct laryngoscopy and for exploration of the larynx. Laryngoscopy further revealed a tear in the left false cord anteriorly, and maceration of the aryepiglottic folds. A transverse cervical incision was made midway between the cricoid and hyoid areas, and the superior and inferior skin flaps elevated. The strap muscles were retracted laterally and the endolarynx was approached through a midline separation of the thyroid cartilage, which was noted to be intact. Mucosal lacerations were closed with 4-0 chromic sutures and the displaced epiglottis anchored to the thyrohyoid membrane (Figure 5). At completion of repair, the

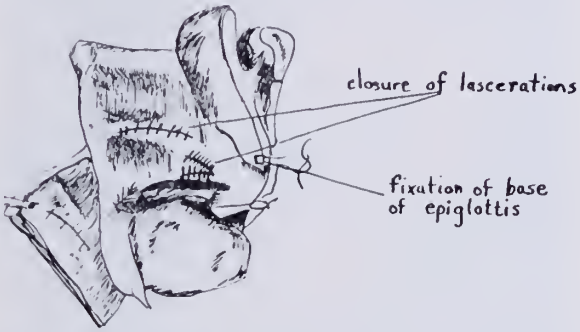

Figure 5—Mucosal lacerations are closed with 4-0 chromic and the epiglottis secured to the thyrohyoid membrane.

interior of the larynx was noted to be covered with mucosa. With sound support by the laryngotracheal skeleton, a No. 20 pediatric silastic chest tube was utilized to stint the larynx, and extended from the aryepiglottic folds superiorly to approximately 2 cm below the true vocal cords. The stint was secured in place by a No. 24 steel wire passed through the thyroid cartilage and secured to the skin of the neck with buttons (Figure 6).

Figure 6—Silastic stint in place, secured with No. 24 steel wire.

Post-operatively, the patient was placed on antibiotics, zinc sulfate and intravenous fluids. On the fourth day, oral feedings were instituted with minimal swallowing

Figure 7—The patient seen one month post-op, prior to stint removal and decannulation.

difficulties. After four weeks the endolaryngeal stint was removed and direct laryngoscopy revealed an adequate laryngeal lumen and good mobility of the vocal apparatus (Figure 7). The patient was decannulated and good airway and voice function noted.

SUMMARY

This presentation describes the nature of acute laryngeal injury, its diagnosis and treatment. Success in this area depends on early diagnosis based on a high index of suspicion. When indicated, open surgical intervention should be instituted within three-to-five days of the catastrophe. An adequate airway, good phonation and the avoidance of chronic laryngeal stenosis are the goals of therapy. A case study is presented, using an acceptable protocol, with achievement of a good result.

REFERENCES

1. Fitz-Hugh, G. S., Wallenborn, W. M. and McGovern, F. H., 1962. Injuries of the larynx and cervical trachea. Ann. Otol. 71:419.

2. Ogura, J. H. and Powers, W. E., 1964. Functional restitution of traumatic stenosis of the larynx and pharynx. Laryngoscope 74:1081-1110.

3. Harris, H. H. and Tobin, H. A., 1970. Acute injuries of the larynx and trachea in forty-nine patients (observations over a 15 year period). Laryngoscope 80:1376-1384.

4. Olson, N. R. and Miles, W. K., 1971. Treatment of acute blunt laryngeal injuries. Trans. Amer. Laryng. Assn. 92:98-103.

5. Pennington, C. L., 1964. Glottic and supraglottic laryngeal injury and stenosis from external trauma. Laryngoscope 74:317-345.

6. Pennington, C. L., 1964. Ibid, p. 320.

7. Ibid, p. 321.

8. Ibid, p. 320.

9. Shumrick, D. A., 1967. Trauma of the larynx. Arch. Otolaryng. 86:109-114.

10. Pennington, C. L., 1972. External trauma of the larynx and trachea. Ann. Otol. 81:546-554.

11. Pennington, C. L., 1972. Ibid, p. 548.

12. Bryce, D. P., 1972. The surgical management of laryngotracheal injury. J. Laryngol. Otol. 86:547-587.

13. Op cit., Olson, et al. p. 705.

14. Downey, W. L., Owen, R. C., and Ward, P. H., 1967. Traumatic laryngeal stenosis—its management and sequelae. So. Med. J. 60:756-760.

15. Op cit., Pennington (1964), p. 328.

16. Op cit., Olson, et al. p. 705.

17. Olson, N. R., Ibid, p. 707.

18. Op cit., Harris, et al., p. 1377.

19. Miles, W. K., Olson, N. R. and Rodriguez, A., 1971. Acute treatment of experimental laryngeal fractures. Trans. Amer. Laryng. Assn. 92:104-116.

20. Miles, W. K., Ibid, p. 719.

21. Pullen, F. and Smith, L. A., 1970. Scientific exhibits S-16, Laryngotracheal trauma. AAOO. Las Vegas, Nevada, October.

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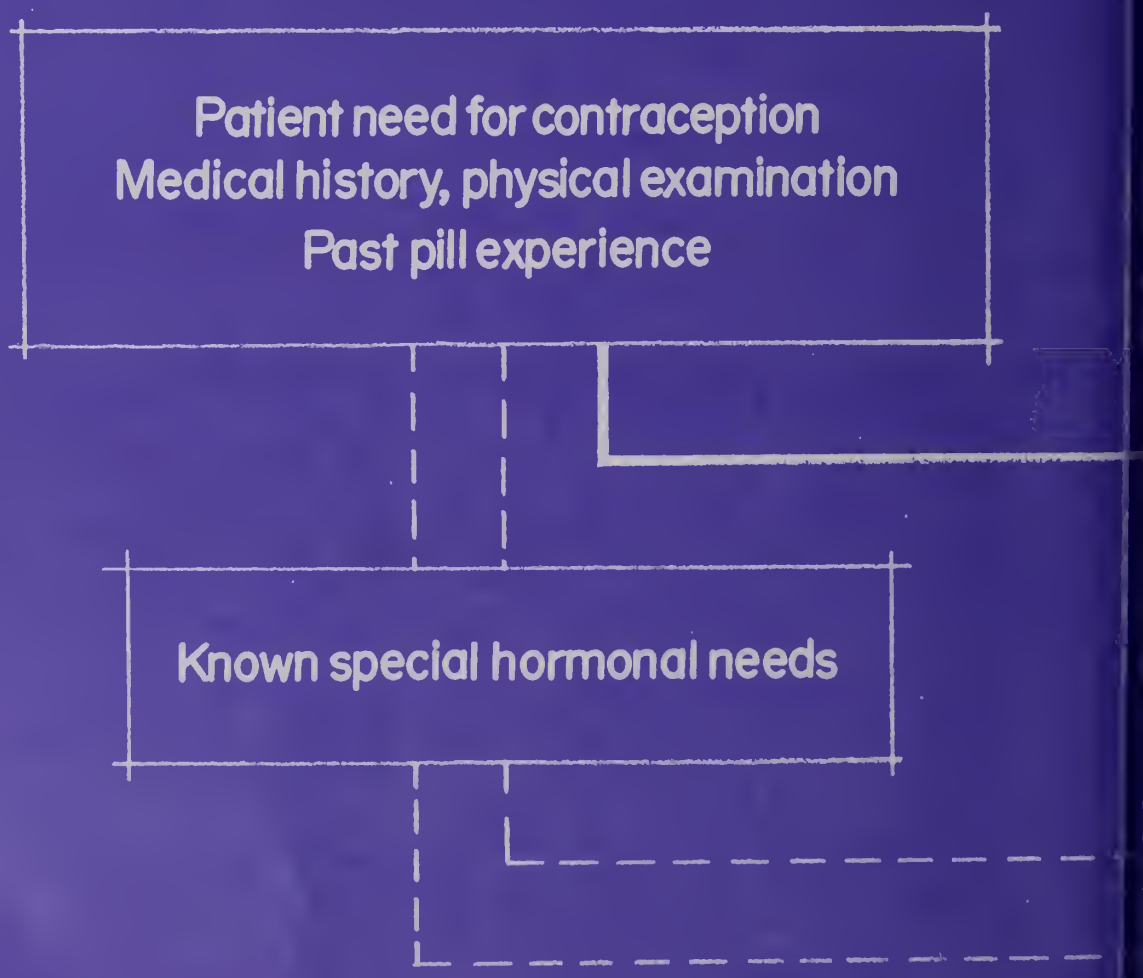

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An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in the United States. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this fac such as epilepsy, migraine, asthma, cardiac or renal dysfuncti require careful observation. In breakthrough bleeding, and in cases of irregular bleeding per vaginam, nonfunctional cau should be borne in mind. In undiagnosed bleeding per vagin adequate diagnostic measures are indicated. Patients with a tory of psychic depression should be carefully observed and drug discontinued if the depression recurs to a serious degree. possible influence of prolonged Ovulen or Demulen therapy on p itary, ovarian, adrenal, hepatic or uterine function awaits furt study. A decrease in glucose tolerance has been observed in a nificant percentage of patients on oral contraceptives. The me anism of this decrease is obscure. For this reason, diabetic patie should be carefully observed while receiving Ovulen or Demu therapy. The age of the patient constitutes no absolute limiting tor, although treatment with Ovulen or Demulen may mask onset of the climacteric. The pathologist should be advised Ovulen or Demulen therapy when relevant specimens are subr ted. Susceptible women may experience an increase in blood p sure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contra tives—A statistically significant association has been demonstra between use of oral contraceptives and the following serious verse reactions: thrombophlebitis, pulmonary embolism and c bral thrombosis.

Although available evidence is suggestive of an association, s a relationship has been neither confirmed nor refuted for the lowing serious adverse reactions: neuro-ocular lesions, e.g., reti thrombosis and optic neuritis.

The following adverse reactions are known to occur in patie receiving oral contraceptives: nausea, vomiting, gastrointesti symptoms (such as abdominal cramps and bloating), breakthro bleeding, spotting, change in menstrual flow, amenorrhea dur and after treatment, edema, chloasma or melasma, breast chan (tenderness, enlargement and secretion), change in weight crease or decrease), changes in cervical erosion and cervical se tions, suppression of lactation when given immediately post part cholestatic jaundice, migraine, rash (allergic), rise in blood p sure in susceptible individuals and mental depression.

Although the following adverse reactions have been reporte users of oral contraceptives, an association has been neither c firmed nor refuted: anovulation post treatment, premenstrual- syndrome, changes in libido, changes in appetite, cystitis-like s drome, headache, nervousness, dizziness, fatigue, backache, sutism, loss of scalp hair, erythema multiforme, erythema nodosu hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of contraceptives: hepatic function: increased sulfobromophthalein tention and other tests; coagulation tests: increase in prothrom Factors VII, VIII, IX and X; thyroid function: increase in PBI butanol extractable protein bound iodine, and decrease in T3 take values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral C traception and Thrombo-Embolic Disease, J. Coll. Gen. Pr *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: vestigation of Deaths from Pulmonary, Coronary, and Cerel Thrombosis and Embolism in Women of Child-Bearing Age, E Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, Investigation of Relation Between Use of Oral Contraceptives Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651- (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Gree G. R., and Smith, H. E.: Thromboembolism and Oral Contrac tives: An Epidemiologic Case-Control Study, Amer. J. Epid *90*:365-380 (Nov.) 1969.

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Medicare and Medicaid, 1973

EDITOR'S NOTE: *The AMA's Council on Medical Service presented two reports of significant interest which were adopted at the 1973 Annual Convention. It is important that they receive wide dissemination within the profession.*

The report on Medicare is included in this issue. The Medicaid report will appear next issue.

Since their inception, with the Social Security Amendments of 1965, Public Law 89-97, the Federal Medicare and the Federal-State Medicaid programs have been matters of continuing concern to the medical profession. Medicare was the occasion of a special session of the House of Delegates following its passage, and both programs have been the subject of reports and resolutions at most sessions since.

Congressional amendments of varying degree have been effected from time to time since original enactment of both laws. Significant changes in the Medicare program, and less drastic, but still important changes in Medicaid, were enacted in Public Law 92-603, the Social Security Amendments of 1972, and signed into law October 30, 1972. This culminated four years of legislative hearings.

The section of PL 92-603 which has, thus far, received the greatest attention from this House is, of course, Section 249F which authorizes Professional Standards Review Organizations (PSROs), the subject of Board of Trustees-Council on Medical Service Report Z (C-72). However, a number of other sections of PL 92-603 will result in substantial changes in Medicare and Medicaid, and some directly affect past concerns voiced by the House of Delegates.

The Council on Medical Service therefore feels it appropriate at this time to present a general report on Medicare and Medicaid, to indicate to the profession some of the future directions these programs may take and as a "progress report" on some of the continuing concerns expressed by the House.

This is by no means intended as a comprehensive "Guide to Medicare or Medicaid," but is rather a review of certain selected facets of the program, the choice being based on three criteria: those matters which have been the subject of reports or resolutions in this House of Delegates in recent years; matters presented in AMA testimony to committees of Congress; those which have been brought to the Council's attention through correspondence from state and county medical associations and individual physicians; and those which the Council, in its review of PL 92-603, believes to be of potential major concern to the medical profession.

Finally, the Council wishes to emphasize that the regulations which will put the flesh on the statutory skeleton of PL 92-603 are, for the most part, not yet published. For that reason, details concerning the impact of many of these amendments are not yet available.

MEDICARE

Eligibility: The number of individuals eligible for care under Medicare will be increased substantially by the addition, in July 1973, of some 1.5 million Social Security disability beneficiaries, who will become eligible for Medicare after 24 months on the disability rolls. This group will comprise less than 10 per cent of the total Medicare enrollment, but will undoubtedly result in some significant changes in the type of care provided—and even of the specialties providing care—since not only are these disabled expected to require significantly more care than the present aged recipients of Medicare, but also they will include all age groups, including children disabled before reaching the age of 22.

The medical profession should be aware, however, that not *all* the disabled will be eligible for Medicare, but only those eligible for cash disability benefits under Social

Security, and only after at least 24 months on those disability rolls.

Patients suffering from chronic renal disease requiring dialysis or transplants will also be classified as "disabled" and will become eligible for all Medicare benefits after three months on dialysis. In numbers, this group is comparatively small—estimated at 10 to 15 thousand new patients annually, with a continuing cumulative case-load of some 50 thousand—but because of the high continuing cost of dialysis, the program is expected to attract special interest. The Council and the Board of Trustees are studying the problems involved in the implementation of this section of the law, and a separate report on the subject is under consideration.

Physician Reimbursement: As the profession is aware, the concept of payment of a "reasonable charge" for physicians' services embodied in the law has been progressively modified by Bureau of Health Insurance (BHI) directives and, currently, by Price Commission controls. At present, Federal regulations and directives define a physician's "customary charge," for Medicare purposes, as his median charge for a given service during the calendar year preceding the current Federal fiscal year—i.e., a dollar amount which would cover his fee in at least half the instances the service was performed during 1972 for the fiscal year beginning July 1, 1973.

The "prevailing charge" for the community, which sets the ceiling on reimbursement for all physicians in the community, is now defined as the 75th percentile of customary charges, weighted by the frequency with which each physician performs the service—i.e., a dollar amount which would cover the charge for the given service 75 per cent of the times it was performed during the calendar year if each physician actually charged, in each instance, his Medicare calculated "customary charge."

Medicare "reasonable charges," using this calculation, establish a level of payment which, in many cases, is significantly below what the physician is actually charging non-Medicare patients currently. However, Price Commission rulings have further restricted Medicare allowances, by defining the Medicare "reasonable charge" screen as a "price list" and applying to the screen itself the 2.5 per cent limitation on increases in physicians' charges. Because of this Price Commission requirement, Medicare can, at present, recognize only a portion of the annual increase in prevailing charge levels which would take place if only the Medicare formula were in effect.

The profession is aware that the Association has protested strongly, and continues to protest both Medicare's arbitrary determination of "customary" and "reasonable" charges, and the discriminatory application of price controls to the medical profession.

PL 92-603 imposes a new statutory limitation on increases in physician reimbursement under Medicare. Beginning in July 1973, the prevailing charge screen, by law, will increase only to the extent that such increase is justified by "economic changes" measured by "appropriate economic index data" gathered by DHEW. The law does not spell out the factors which will be part of the "index," but Congressional reports suggest a formula which takes into account increases in the physician's cost of doing business and earnings increases in the general population.

It is clear, however, that from this point, while some physicians' Medicare reimbursement may rise as their non-Medicare charges rise, the "prevailing charge" ceilings on Medicare reimbursement will no longer bear any direct relationship to what physicians actually charge.

The question of what "economic indexes" will be applied is now under exploration by DHEW and the Federal Office of Management and Budget, and every effort is being made by the Council on Medical Service to seek realistic measures. However,

(Continued on Page 256)

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(Continued from Page 254)

since the restrictions imposed by the Price Commission result in a reimbursement level below the prevailing charges which would be authorized by PL 92-603, Federal officials do not consider development of these indexes a priority item at present.

Physicians in Teaching Hospitals: When Medicare was enacted, there was nothing specific in the law concerning billing by physicians in teaching settings. Payment of interns and residents was considered part of the Hospital expense, to be reimbursed under Part A; payment under Part B to the attending physician was based on a requirement that he give personal attention to the patient. Considerable confusion resulted with, in some areas, new billing approaches to seek Part B reimbursement for physicians' services to teaching patients.

Section 227 of PL 92-603 establishes a new approach to determining the source and amount of physician reimbursement for patients in a teaching setting. Basically, what it attempts to do is distinguish between private patients, for whom care will be paid under Part B on a "reasonable charge" basis, and non-private teaching patients, for whom care will be paid under Part A as a "reasonable cost" of the hospital.

The law specifies that the "private patient" type payment will be made where the hospital, since the start of Medicare, has been routinely billing and collecting for services to Medicare and non-Medicare patients alike for the services rendered by physicians. Other criteria for determining who are "private patients" are left to DHEW, but some indicators suggested by Congress are attendance by a particular physician out of the hospital and in the institution. Detailed directives for distinguishing the two types of patients have not yet been worked out.

However, it should also be noted that, where physicians' services are considered part of the teaching program, the payment to the hospital, on a "reasonable cost" basis, is to go into a fund designated by the organized medical staff of the hospital or, if services are furnished by a medical school, by the faculty for improvement of care or for educational or charitable purposes. Payment to the fund for physicians' services can be made, on an agreed reasonable cost basis, even when the hospital incurs no actual cost for such services, as when a physician participates in a teaching program on a voluntary basis.

Retroactive Denial: For the past several years, the House of Delegates has urged and the Council has sought remedies to reduce the instances where a paid claim for institutional services has, on subsequent review, been found to be improperly paid. In such instances, the paid claim becomes an "overpayment," subject to recovery from the facility by Medicare, with consequent problems for the hospital or nursing home, the patient (who thereby becomes newly liable for the charge), and the physician, who is often blamed for the confusion.

The Council on Medical Service, as the House was informed in Board of Trustees Report FF (A-72), discussed this problem with BHI officials and suggested both increased guidance to utilization review committees as to the bases of Medicare coverage and a statute of limitations which would restrict the length of time during which a paid claim was subject to review.

The House of Delegates has also adopted so much of Resolution 48 (C-72) as instructs the Association to seek a one-year statute of limitations on retrospective audits of necessity for hospitalization and a right of appeal to BHI by patient, hospital, and attending physician on all challenged periods of hospitalization, regardless of the amount of funds involved.

One provision of Resolution 48 (C-72), calling for an unchallengeable 7-day period of hospitalization for all Medicare beneficiaries, was not adopted but was referred to the Board of Trustees for report at this 1973 Annual Meeting. The Council has dis-

(Continued on Page 258)

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(Continued from Page 256)

cussed this provision, but has not urged its adoption, being conscious of the concern expressed during reference committee hearings that this "might, in effect, be carte blanche approval of almost routine admission for the purpose of diagnostic workups" and would thus weaken Association efforts to reduce unnecessary hospitalization. The Council is also of the opinion that such a provision would require a statutory change in Medicare law, and believes that the impact of PSRO and other Medicare changes should be evaluated before this step is considered.

The Council has, however, brought to BHI attention those recommendations of Resolution 49 (C-72) which were adopted; neither is immediately attainable, but some progress in reducing retroactive denials may come from legislative changes made by PL 92-603 and by administrative changes planned by BHI.

Of the statutory changes in this area, perhaps of most immediate significance is the enactment of Section 281, PL 92-603, which establishes a *three-year statute of limitations* under which, if an incorrect payment for custodial care or services found not medically necessary is discovered over three years after payment was made and the recipient was without fault in claiming the payment, no recovery will be made. While this is less than the one-year statute of limitations urged by the Association, it is a substantial improvement over the prior situation when all paid claims, from the first day of the program, were liable to recovery. In addition, the law gives DHEW authority to reduce the three-year period to one, if it can be done without detriment to program objectives. BHI officials desire experience with the three-year statute before considering any reduction of the time.

A second change was made by Section 213, PL 92-603, which will provide relief in individual cases where, after payment, it is determined that care rendered by a physician or institution is medically unnecessary or custodial, by Medicare standards. A *waiver of liability* is allowed, on a one-time basis, where the physician or the provider and the patient submitted the claim in good faith with the expectation that Medicare would cover it; *i.e.*, Medicare will not seek to recover the amount "overpaid," but will notify the parties involved of the reasons why the service would not ordinarily be covered and that the waiver will not be applied in future similar instances. This procedure not only protects the participants from unexpected expenses when they have acted in good faith, but will also provide an educational mechanism so that physicians, providers, and patients will have a clearer understanding of what Medicare does cover.

This section does, however, pose some potential problems for providers and physicians, although it applies only to physicians who have accepted assignment and will not affect those using direct billing. The "waiver of liability" applies only when all parties act in good faith and with due care; if a provider or a physician who accepts assignment submits a claim which he could be reasonably expected to know is not covered, the claim (if paid) is considered an "overpayment" and is subject to recovery. Further, if a provider or physician, knowing that Medicare will not pay, collects from a patient who does expect Medicare to pay, Medicare can indemnify the patient for the amount he had paid and recover from the provider or physician.

In the usual pattern of assignment billing, the last procedure above will seldom apply. It could arise, however, when a physician had collected part of his charge from the patient and accepted assignment on the rest or under other unusual circumstances. It appears only common sense that the physician who accepts assignment should inform the patient in advance if there appears some doubt whether Medicare will approve payment. BHI guidelines for this section are still being developed, but BHI expects

(Continued on Page 260)

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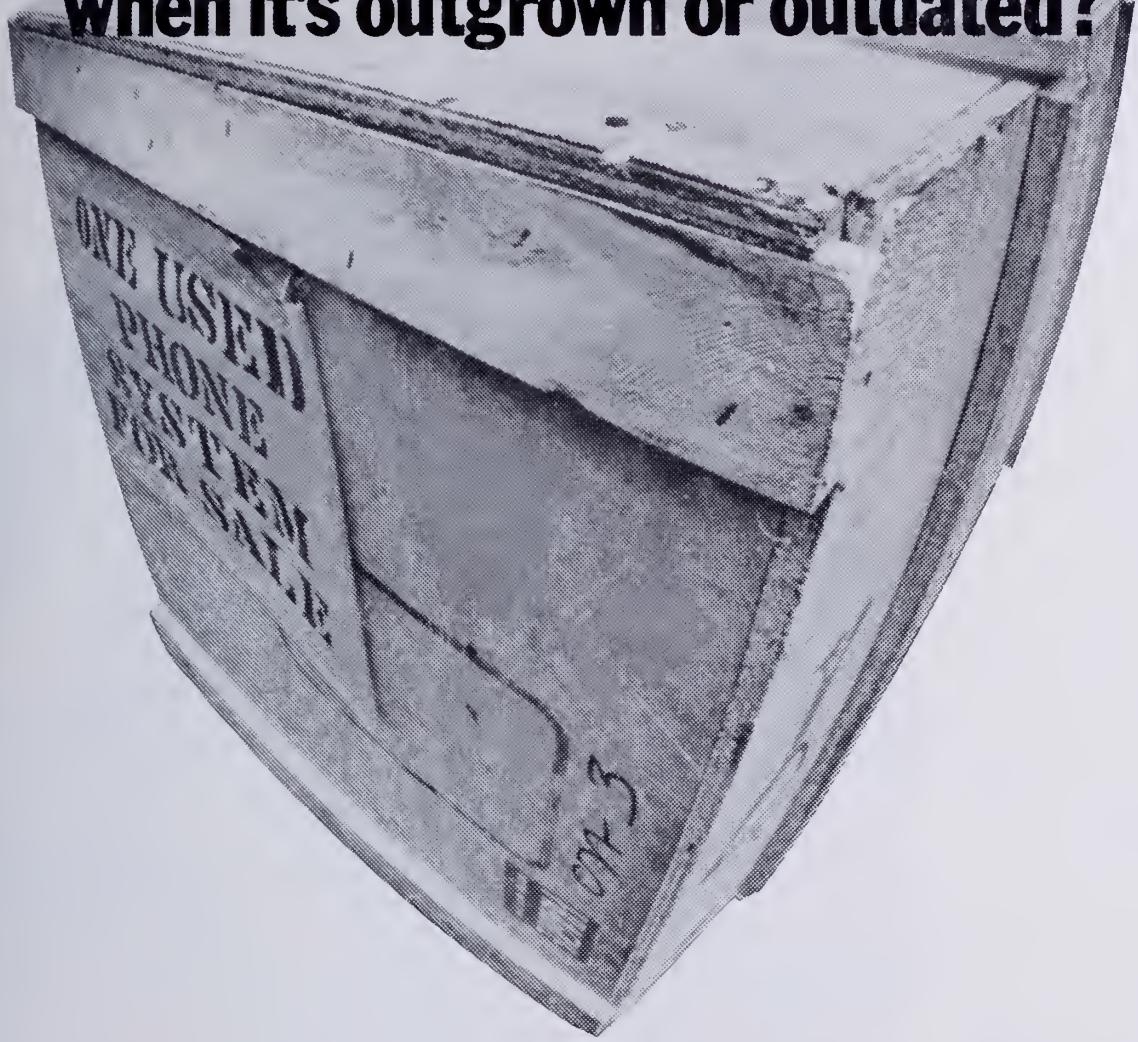

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(Continued from Page 258)

it will be applied initially in only the most obvious and clearcut cases.

A third change in the law, Section 228, PL 92-603, authorizes *advance approval of length of stay* in skilled nursing facilities and home health programs. This follows the lines of the "assurance of payment" program for extended care facilities (now renamed "skilled nursing facilities") cited in Board of Trustees Report FF (A-72). For specified diagnoses, BHI will authorize payment for at least a specified period of time, based on the condition of the patient at time of admission.

Development of this procedure is already under way. BHI medical staff have been working with a group of physicians, including representatives of the Council, and with providers to develop descriptors and average lengths of stay for a group of diagnoses which cover some 60 per cent of the admissions to skilled nursing facilities. Using this list, if a physician certified the need for services and one of these diagnoses, payment would be guaranteed for a specified length of time, unless the utilization review committee decided the patient should be released earlier.

The Council wishes to emphasize here that this is *not* a "ceiling" on the number of days' care which will be reimbursed but rather, for these conditions, a "floor." Additional days of care will be approved on the usual basis of medical justification for continued stays. Indeed, since the guaranteed stay will, in many cases, be less than the average stay for the condition, patients will be expected to stay longer.

As to BHI administrative actions, BHI officials have expressed the intention of shifting more responsibility for coverage decisions to *utilization review committees.* As the profession knows, the utilization review committee now has, by law, the authority to terminate Medicare payment for inpatient services to those patients for whom they consider further institutional care medically unnecessary. However, the Medicare carrier has had the authority to ignore a review committee's decision that continued institutional care *is* medically necessary.

Medicare officials have expressed the opinion, under the waiver provision, Section 213, PL 92-603, that the matter of whether an institution has exercised due care in submitting claims will depend, in large part, on efficacy of its utilization review committee. They see a possible shift to basing reimbursement on the reliability of the review committee, rather than on intensive carrier review of individual claims.

Similarly, Section 213 provides a *right of appeal* by a provider or by a physician who has accepted assignment against a carrier decision that billed care is medically unnecessary or custodial, to the same extent that the recipient already has such right of appeal. While this appeals process does not go as far as the House action asks, since it allows reconsideration and hearing by the carrier, rather than BHI, it is at least a step forward.

It should be noted, perhaps, that the PSRO networks, once implemented, while having many potential drawbacks, may also provide physicians with significantly more assurance as to what Medicare will cover, as well as a structured mechanism for appeal of all decisions with which they disagree.

Hospitalization Standards: Two other requirements for hospital care under Medicare Part A have attracted considerable interest from the House. Almost since the beginning of the program, the Association has opposed the statutory requirement that a physician *certify and recertify* the need for hospitalization. When the law was first enacted, it required that initial certification be at the time of admission to the hospital; this admission certification has been eliminated, but the law still requires certification and recertification at such times as set forth in regulations—currently, no later than the 12th and 18th days.

(Continued on Page 265)

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(Continued from Page 260)

The Association has urged that the certification and recertification requirements be deleted from the law in its testimony before Congress, on the basis that it serves no useful purpose and simply adds to the physician's paperwork for the program. Similar presentations have been made to the Health Insurance Benefits Advisory Council (HIBAC) and, by the Council on Medical Service, to Medicare officials.

However, it remains a statutory requirement of the Medicare program and the only present legislative authority under which it can be dropped lies in a section of the PSRO legislation which authorizes DHEW to eliminate other types of controls when it finds that the PSRO functions to the same effect. Since Title XI (the Professional Standards Review title of the Social Security Act) requires PSROs to establish points in time, consistent with average lengths of stay for given illnesses and types of patients, at which physicians will certify the need for continued institutional care, it is assumed that PSRO certification will tend to supersede current Medicare certification procedures.

The other hospital-oriented problem was raised by Resolution 10 (C-72), which urged a change in the Medicare conditions of participation for hospitals which require that *"A physician sees" all patients arriving for treatment in the emergency room.* The Council has presented to Medicare officials the House's objection, which is not to a physician's assuming professional responsibility for the care of those coming to the emergency room, but to the requirement that he physically "see" each such individual. The Council pointed out that, with many patients using the emergency room for non-emergency elective care, the current requirement, which would not allow the physician on call for emergency service to decide on the basis of information from the emergency room staff whether a particular patient requires his immediate presence, results in a waste of physician time and could make emergency service an insupportable burden in some communities. BHI officials have agreed to reconsider the wording of this section of the regulations.

Skilled Nursing Facilities: As previously noted, the term "extended care facilities" or "ECFs" in Medicare legislation has been replaced, by PL 92-603, with "skilled nursing facilities;" the same term replaces "skilled nursing homes" in Medicaid legislation. (sec. 278)

While there is no significant change in the concept with the change in name, the new legislation may result in some expansion of coverage, through two changes. The basis for Medicare reimbursement of post-hospital care in a skilled nursing facility remains the need of the patient, on a daily basis, of "skilled nursing services" provided directly by or under the supervision of skilled nursing personnel, for the conditions for which he was hospitalized. This is essentially the definition previously in effect for extended care services, with the reimbursement decision made on the basis that such services or supervision could be provided *only* by skilled professional nursing personnel, not by a lesser category of para-professional or auxiliary personnel.

However, the law now also recognizes the need for "skilled rehabilitation services" as a basis for reimbursement in skilled nursing facilities. It does not spell out what such services may be; regulations will probably attempt to define rehabilitation services which need a degree of professional skill equivalent to that required for skilled nursing services.

The second change may prove more significant. It extends coverage to skilled nursing care, as previously defined, and skilled rehabilitation services which, "as a practical matter," can only be provided in a skilled nursing facility on an inpatient basis. Medicare officials have not yet developed any criteria for deciding when, as a practical matter, inpatient care is neces-

(Continued on Page 270)

Gantanol (sulfamethoxazole) and t

0.1 M.I.C. for three hours
Similar elongations occur regardless of antibacterial used.

1.0 M.I.C. for three hours
Similar midcell defects seen with increased antibacterial concentrations.

10 M.I.C. for three hours
Similar spheroplast-like forms appear with high concentrations of the antibacterials.

E. coli + sulfamethoxazole

E. coli + tetracycline

The Scanning Electron Microscope (SEM) reveals the efl

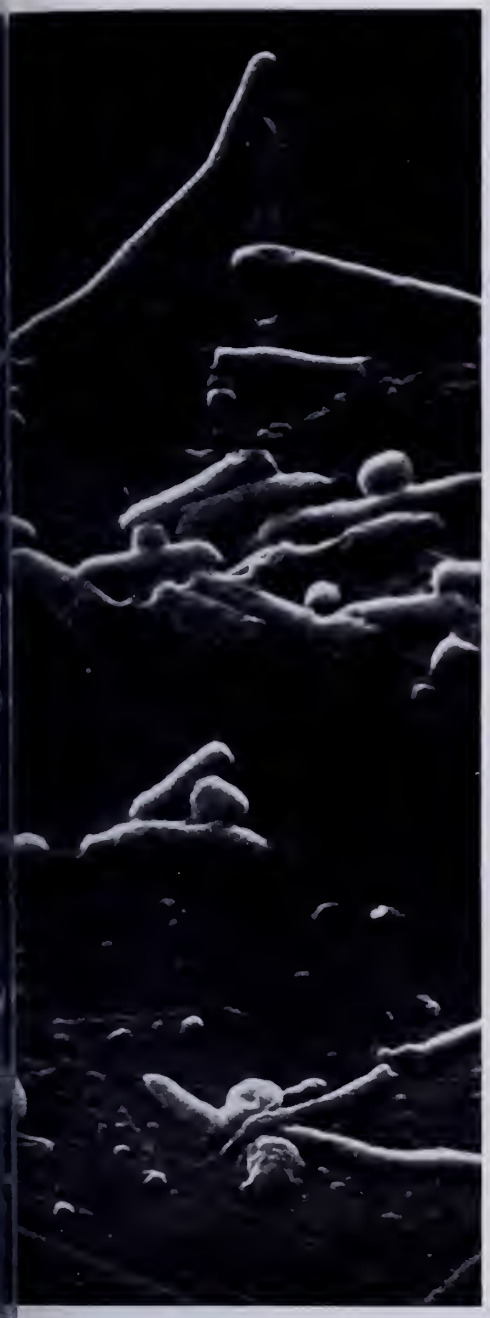
The *in vitro* experiment. These SEM photomicrographs were taken as part of a study exploring the effects of various antibacterials with different modes of action on the surface morphology of bacteria. The scanning electron microscope was used because of its ability to show three-dimensional views of organisms, enabling better definition and appreciation of surface morphology.

For this portion of the experiment, *E. coli* were exposed to the following agents: sulfamethoxazole, a chemical drug which acts by interference with para-aminobenzoic acid utilization; tetracycline, whic feres with intracellular protein synthesis; and cep lothin and ampicillin, which are cell-wall-active c

Strains of *E. coli,* each susceptible to the respe antibacterials, were exposed for 15, 30, 60, 120 a 180 minutes and 18 hours to several concentratic of each agent.

Following the 180-minute or three-hour expos to the antibacterials at 0.1 M.I.C., 1.0 M.I.C. anc 10 M.I.C., photoscans of the *E. coli* were taken. shown above, regardless of the antibacterial ager used or its mode of action, the changes in surface morphology were remarkably similar... elongati at low drug concentrations, midcell defects at hi

ıree-Dimensional World of SEM



E. coli + cephalothin

E. coli + ampicillin

ertain antibacterials on bacterial surface morphology

ıtrations and ultimate progression to sphero-
ke forms.[1]

interpretation. "At present, the significance of
bservations in clinical infection must be con-
ı with caution, but it is hoped that these data
mulate a reevaluation of present concepts of
ure and role of morphological variants of bac-
posed to a variety of antibacterial factors."[2]

**ıould be noted that this information represents
ı *vitro* research. No clinical significance can
wn from this study concerning the effective-
ness of any of the agents discussed, as it is not possible to extrapolate *in vitro* data to humans. This information is presented to demonstrate the continuing research activities in the area of antibacterials, particularly modes of action and surface morphology.**

[1]Data on file, Hoffmann-La Roche Inc., Nutley, N.J.
[2]*Antimicrob. Agents Chemother., 1*:164, 1972.

See next two pages for product information.

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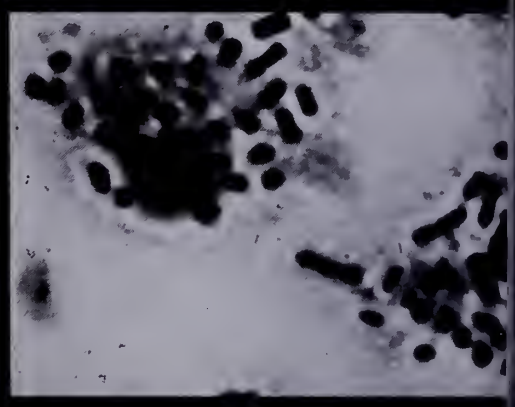
Observations fro

E. coli—Fluorescent stain



Klebsiella sp.—Stain to define capsular envel

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Antibacterial levels of Gantanol usually appear in blood and urine in from 2 to 3 hours after th initial 2-Gm adult dose. This rapid initiation of effective antibacterial activity enables prompt t ment of certain nonobstructed urinary tract infections and may also help avert possible sequel

■ **Around-the-clock coverage for 14 days**

Mounting evidence in current medical literature suggests a minimum of 14 days' continuous therapy for certain urinary tract infections.* Following the initial 2-Gm adult dosage of Gant each 1-Gm dose provides up to 12 hours of antibacterial activity during the treatment perio When urinary tract infection is more severe, *t.i.d.* (q. 8 h.) dosage schedule may be requir Both regimens provide around-the-clock therapy, important because normal urinary reter during sleep tends to favor bacterial proliferation. It is also convenient for patients not to ha to take middle-of-the-night medication.

■ **Also effective in certain nonobstructed chronic and recurrent urinary tract infection**

Nonobstructed urinary tract infections, such as cystitis or pyelonephritis—chronic and/or rec rent—develop more commonly in the elderly and debilitated, and response to Gantanol is oft highly satisfactory.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

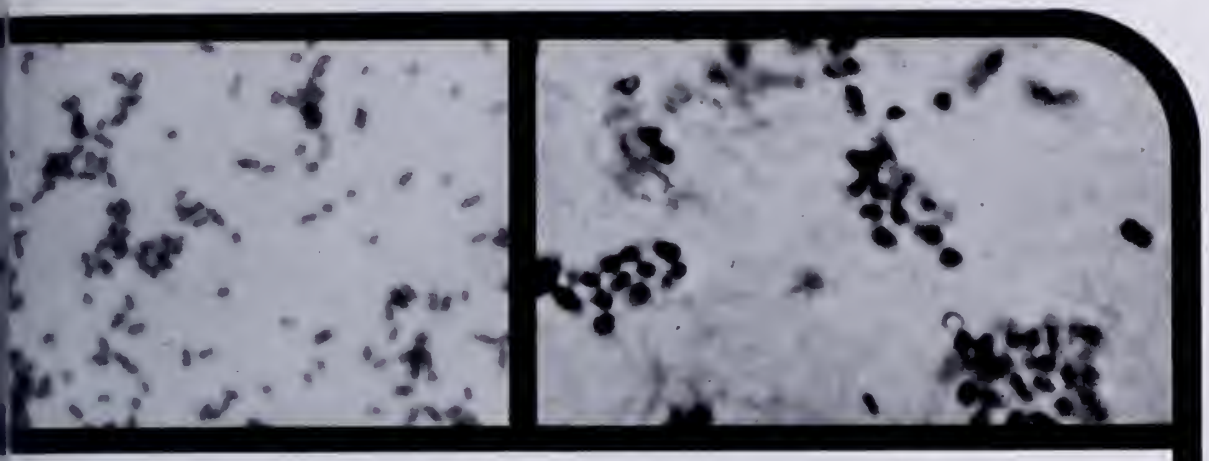
Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not era or prevent sequelae (rheumatic fever, glomerulonep of such infections. Deaths from hypersensitivity rea agranulocytosis, aplastic anemia and other blood dysc have been reported and early clinical signs (sore fever, pallor, purpura or jaundice) may indicate s blood disorders. Frequent CBC and urinalysis with scopic examination are recommended during sulfon therapy. Insufficient data on children under six with c renal disease.

Precautions: Use cautiously in patients with im renal or hepatic function, severe allergy, bronchial asth glucose-6-phosphate dehydrogenase-deficient individ whom dose-related hemolysis may occur. Maintain ad fluid intake to prevent crystalluria and stone forr

Adverse Reactions: *Blood dyscrasias* (agranuloc aplastic anemia, thrombocytopenia, leukopenia, her anemia, purpura, hypoprothrombinemia and methe

inical practice



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anol Tablets or the pleasant-tasting, cherry-flavored Suspension can provide dependable
acterial activity to control susceptible nonobstructed cystitis and pyelonephritis. Sympto-
improvement usually may be expected to begin within 24 to 48 hours. Usual precautions
sulfonamide therapy should be observed, including adequate fluid intake. Gantanol is
rally well tolerated, with relative freedom from complications; the most common side effects
ausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examina-
are recommended during therapy.

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onobstructed cystitis due to susceptible organisms

Gantanol® B.I.D.
ulfamethoxazole)
asic therapy

ia); *allergic reactions* (erythema multiforme, skin
ons, epidermal necrolysis, urticaria, serum sickness,
s, exfoliative dermatitis, anaphylactoid reactions,
bital edema, conjunctival and scleral injection, pho-
itization, arthralgia and allergic myocarditis); *gastro-
nal reactions* (nausea, emesis, abdominal pains,
tis, diarrhea, anorexia, pancreatitis and stomatitis);
eactions (headache, peripheral neuritis, mental de-
on, convulsions, ataxia, hallucinations, tinnitus, ver-
nd insomnia); *miscellaneous reactions* (drug fever,
toxic nephrosis with oliguria and anuria, periarteritis
a and L. E. phenomenon). Due to certain chemical
rities with some goitrogens, diuretics (acetazolamide,
les) and oral hypoglycemic agents, sulfonamides
caused rare instances of goiter production, diuresis
ypoglycemia as well as thyroid malignancies in rats
ng long-term administration. Cross-sensitivity with
gents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

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Nutley, N J 07110

(Continued from Page 265)

sary. It is reasonable to assume, however, that this wording in the law will result in some shift of emphasis from approving reimbursement for inpatient services only when, ideally, inpatient status itself is essential to the type of care provided to considering the practical availability—or unavailability—of outpatient sources of the care needed.

Explanation of Medical Benefits Form: Resolution 43 (C-72), referred to the Board of Trustees for report back at this 1973 Annual Meeting, called on the Board to clarify the EOMB form—specifically the phrase, "more than the allowable charge" used to explain reimbursement based on less than the physician's actual charge. The resolution asked the Board to request a formal response from the Social Security Administration and to publicize that response.

In its own contacts with Medicare officials, the Council on Medical Service has pressed for a number of years for wording which would be more acceptable to the medical profession and, indeed, much formal correspondence between the Board itself and the Bureau of Health Insurance has already passed on this matter. In fact, the present "more than the allowable charge" phrasing was, at one time, considered an improvement over the wording first used on the EOMB form, "more than the reasonable charge."

Until the passage of PL 92-603, the situation was complicated by the fact that the Medicare law spoke of paying a "reasonable charge" but provided no clear legal definition of the term. When HR 17550, in the 91st Congress, and HR 1, 92nd Congress (which became PL 92-603), were under consideration, HIBAC suggested and BHI was seriously considering incorporating a description of the prevailing charge ceiling established in those bills in the EOMB form as an explanation of reduction in physicians' charges. However, it should be recognized that this approach itself might be too complex for some Medicare beneficiaries to understand, and the additional restrictions placed on prevailing charges by the Price Commission make the explanation even more obfuscatory.

The problem lies in finding a phrase which not only satisfies the profession and can be understood by the beneficiary, but which truly represents the provisions of the law and is acceptable to those outside the profession. The Council has suggested the phrase, "Medicare allowance towards charges in this case," which is under consideration by BHI, but no position change can be reported as yet.

Communications: In recent years, several sessions of the House of Delegates have urged clearer interpretation to beneficiaries of their actual coverage under Medicare, and the Council has transmitted these recommendations to BHI. Until this year, the agency legitimately was reluctant to make substantial revisions in the manual sent to all Medicare beneficiaries, while HR 17550 and HR 1, which would make significant changes in the program, were before Congress and would, on passage, immediately require further drastic changes. However, with the passage of PL 92-603, a new manual is under preparation, for mailing to all Medicare beneficiaries. A draft is expected to be completed by mid-year, and the Council hopes to have some input in the final wording so that beneficiaries may be more accurately informed as to what coverage the program offers.

New Drug To Combat Blindness

Eye researchers report that a new medicine, effective in animal tests and human trials, may be able to fight blindness caused by viral infections.

The drug, called Ara A, or adenine arabinoside is a white powder. It was derived from the mold *Streptomyces antibioticus.* In tissue cultures, it was effective against DNA viruses—especially against the kind known as herpes.

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Substitute Skin Found By Researchers at UAB

A material used to make thousands of children's toys, polyvinylchloride (PVC) has been found by researchers at the University of Alabama-Birmingham (UAB) Medical Center to be one of the best cosmetic substitutes for human skin.

Lifelike substitute skin is vital to the work of the Regional Maxillofacial Prosthetics Center at UAB. The Center makes prosthetic devices to correct congenital and acquired defects in the face and neck region. The abnormality may be a birth defect such as a cleft palate, or the loss of an ear, nose, eye socket or any portion of the region through surgery.

"The patient may have a disfigurement that discourages normal social and business activities," Dr. Dwight J. Castleberry, associate professor of dentistry and chairman of the Department of Prosthodontics and director of the Center, said. "When we can correct that defect cosmetically, the patient benefits psychologically and physically."

Using PVC, researchers developed a highly durable skin-like substance which can be color-matched to the patient's own skin. A plaster mold is made of the facial area and a clay model of the prosthetic device is made to assure an accurate fit. From this model a metal mold is cast, and the actual device is formed.

The scientists at the Center, which is a function of the UAB Department of Prosthodontics and established and supported under a grant from the Social Rehabilitation Service, U. S. Department of Health, Education and Welfare, strive to make the device as lifelike as possible. They even use fine red and blue nylon fibers in the material to simulate the tiny capillaries and veins which network through the surface of the skin.

In some instances, the Center has recreated an entire side of a person's face, where detection of the prosthesis is possible only through close scrutiny, according to Dr. Iradj Sooudi, assistant professor of dentistry. Once the prosthetic device is completed, it is fitted to the patient by means of two-sided surgical tape, making it adhere to the affected area while remaining removable for cleaning and maintenance.

PVC is mixed in a liquid state and can be processed to any shape desired. It is nontoxic, so it can be safely used externally. The success of the prosthesis, though, is dependent on how it reacts to normal human use. After much research, PVC was chosen as a highly successful material. It has been subjected to extreme weather conditions in tests by the dental school's Department of Bio-materials to determine necessary changes.

Researchers in that Department use a Weather-Ometer and subject the material to thousands of hours of heat, ultraviolet rays, moisture and dryness. Through this testing procedure, as well as others, the investigators have developed Prototype Four of PVC, and feel they have exhausted the possibilities of this substance.

Dr. T. E. Fischer, professor and chairman of the Department of Biomaterials, said PVC is a plastic and therefore tends to harden after long periods of time. He said polyurethanes and perhaps a new silicone substance, being developed in cooperation with Birmingham's Southern Research Institute, may hold keys to further experimentation with substitute human skin.

"A person with a facial defect may not want to be near anyone or be seen by anyone," Dr. Fischer said. "We give them replacements that are lifelife and difficult to detect. We attempt to enable them to go back to work and earn a living, returning to society.

"Our objective is to make self-supporting

(Continued on Page 276)

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Precautions: As with other thyroid preparations, an overdosage of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's Disease (chronic adrenocortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to p with cardiovascular disease; developm chest pains or other aggravations of car cular disease requires a reduction in dosa

Contraindications: Thyrotoxicosis, acute m dial infarction. **Side effects:** The effects o THROID (sodium levothyroxine) therapy ar in being manifested. Side effects, when t occur, are secondary to increased rates o metabolism; sweating, heart palpitation or without pain, leg cramps, and weigh Diarrhea, vomiting, and nervousness hav been observed. Myxedematous patient heart disease have died from abrupt inc in dosage of thyroid drugs. Careful obse of the patient during the beginning of ar roid therapy will alert the physician to a toward effects.

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2 Because T_4 converts to T_3 at the cellular level, it provides full thyroid replacement at maintenance doses.[1,2]

3 T_4 hormone content is controlled by chemical assay.

4 *Synthroid* is assayed chemically; no biologic test is necessary to measure potency.

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most cases with side effects, a reduction of ...se followed by a more gradual adjustment ...rd will result in a more accurate indication ... patient's dosage requirements without the ...rance of side effects.

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Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, U.S.P., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. 49:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

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(Continued from Page 273)

individuals from psychological recluses."

The Center's work to meet this objective involves more than just cosmetic improvements. In treating patients whose palates (roof of mouth) are defective, a new device has been invented by Dr. Samuel G. Fletcher, professor and chairman of the Department of Biocommunication at UAB, to help doctors test the effectiveness of prostheses.

Termed the Tonar II, the new instrument records the amount of spoken sound spilling through the nose, the chief speech problem of victims with missing or cleft palates. Acrylic resin materials are used to create a new palate inside the mouth, and the Tonar II is used to graph the results as the patient speaks with and without the man-made palate. Guided by these findings, the prosthetic device can easily be altered, if needed, to improve the aesthetic quality and understandability of speech.

Sound Wave Diagnosis For Cancer Developed

A combined system of sound waves, computers, and radiation therapy has been developed by a physician at the University of Alabama-Birmingham (UAB), providing a new weapon in the fight against cancer.

Dr. Donn J. Brascho, associate professor of therapeutic radiology at UAB's School of Medicine, explains the system as "computerized radiation treatment planning that utilizes ultrasound detection as a direct source of information in localizing a tumor."

It is the first such therapy system to use this type of sound wave diagnosis.

Ultrasound scanning is a relatively new technique of studying cross sections of human anatomy, utilizing echoed sound waves to provide information about structures beneath the body surface. These waves are electronically converted to a two-dimensional image on an oscilloscope screen and photographed for study, much like the sonar operation on a submarine.

Dr. Brascho's system combines an ultrasound unit with a computer, producing a graph that can provide accurate information about the presence, size, location and extension of malignant tumors rapidly and safely. The system has been in use for two years at UAB, and more than 300 scans have been performed during that time.

"These experiences," said Dr. Brascho, "have indicated the value of this method of examination in routine treatment and planning the management of patients with malignancy."

Dr. Brascho feels that the ultrasound unit is a nearly ideal diagnostic tool. He points out that it is non-invasive, non-traumatic, and operates at a diagnostic energy range level which is non-injurious to human tissues.

Interfaced with computers programmed for radiation planning, the system can develop treatment plans in a fraction of the time required by manual techniques.

Dr. Brascho presented his system to colleagues at the 55th Annual Meeting of the American Radium Society in Colorado Springs last April, and to the Second World Congress in Ultrasound June 7 in Rotterdam. His work emphasizes the new use of computers and their important role in medical treatment.

"The speed and accuracy of the operation, the ease with which the treatment plan is obtained, and the rapid replanning capability of the system make it a very valuable radiotherapy tool," he said.

Experience is a hard teacher. It gives the lesson after the test.

CONTINUING MEDICAL EDUCATION

MASA Applies For CME Accreditation Authority

Larry Dixon

With its approval of the Medical Association of the State of Alabama's application to the AMA to become the accrediting agency for intrastate continuing medical education producers, the Board of Censors created an avenue leading to available and convenient CME for every physician in this state.

At this time there is only one accredited institution in this state that can offer a CME program accredited by the AMA. The importance or lack of importance of such a situation depends largely upon the value the conference-attending physician places on assured quality as well as educational credits. If the physician is interested in documenting his efforts to stay abreast of the latest innovations, techniques and medical information, a conference accredited by the AMA and offering educational credits for the Physician's Recognition Award (P. R. A.) is a very logical manner for him to proceed. The logic of this is readily observable as evidenced by the increasing number of physicians making application for the P. R. A.

Doctors are becoming cognizant of the need to document their educational activities. Many believe they can no longer be satisfied with an inner sense of achievement and professionalism. Such an attitude is unfortunately one of sound reasoning.

This same belief is held by many members of the Medical Education Committee, the initiating body of the accreditation program. Although an attempt to create the ideal situation would be the first reason expressed by the members of this Committee if they were asked for their purpose in developing the Medical Association's accreditation program, they are all aware of the increasing need to document continuing medical education. Having established the committee's realistic sense, let's pursue the idealistic aspects of their achievement.

The American Medical Association recognized the impossibility of being the sole agency with the authority to accredit an institution desiring to produce CME conferences. Concurrently, the AMA knew it must guard the integrity of its Physician's Recognition Award, which meant that certain standards had to be met. The solution was to give this authority to a state medical association that could exhibit its determination to meet the AMA standards.

The Medical Association of the State of Alabama is in the process of convincing the AMA that this Association would conduct an accreditation program as carefully as that national body has. The Education Committee prepared the aforementioned application with care and an intense understanding of the necessity of following the AMA suggested guidelines. This document is presently in the hands of Dr. Rutledge Howard, Associate Director of the AMA's Division of Continuing Medical Education. The Education Committee should be apprised of its acceptance or rejection by the beginning of next year. The decision will be made by the Council on Education which meets in California this December. Contact with the AMA has lead the Education Department to anticipate no major difficulty in having the program accepted.

When the AMA grants the Medical Association of the State of Alabama authority to accredit CME producing institutions or agencies within this state, an immediate

effect will be an increase in the number of places a physician can attend conferences and receive "Category One" credit. There, of course, will be other immediate effects such as conference convenience and conferences developed around local medical situations and interests. As the state program develops, these immediate effects will become quite apparent. More than likely positive benefits will occur that had not been anticipated by the Education Committee. Along the same vein, the Committee is equally sure there will be unforeseen problems as well. However, the benefits of this program will greatly overshadow the time, effort and problems involved.

A discussion of a far-reaching effect or two is certainly called for. There is a saying among public school educators in this state that is generally in order when a national comparison is being made. However, "Thank God for Mississippi, it keeps us from being last," is certainly not going to be called for where continuing medical education is concerned. Instead of bringing up the rear, Alabama will be among those top few states that are leading the way in CME. The vanguard is where this Association wants to be, as determined by the creation of the Education Department.

Another long range effect will be the benefit derived by the hospitals from this program. A situation is quickly approaching in which a hospital that has not been accredited by the Joint Commission on the Accreditation of Hospitals will function in a severely limited role. At present P. L. 92-603, Section 213, requires that Commission's accreditation to continue to minister to Medicare patients without being retrospectively denied payment. The law further states the illegality of attempting to collect from the patient once payment has been denied.

A viable CME program is a necessary requirement for JCAH accreditation. With the Medical Association operating a program designed to reward an institution's efforts in CME, as well as offering, through its Medical Education Committee, aid in establishing a viable program, few hospitals will refrain from making the effort. A hospital with this Association's accreditation will be in a position to offer fully creditable CME to its physicians, as well as to any visitors. In this era of increasing emphasis on CME, such a situation would be of great value to the physicians of this state.

Although final approval from the AMA is still months away, the physicians involved in the development of this program should feel as if they have contributed to the quality as well as convenience of the CME that will be produced in this state from now on. Through their efforts, Alabama has made the first step toward joining the national leaders in the continuing education area.

Immunological Prostate Cancer Test Developed

A research team at the Presbyterian Hospital, New York City, investigating methods for prevention and control of prostatic enlargement have recently devised a new technique for identifying prostate cancer antigen-antibody complexes in tissue or sediments by a permanent immunological method.

Up to now, immunofluorescence was the standard available technique and has the severe disadvantage that it faded so quickly as to have no permanence. The new "enzyme-bridging" technique makes it possible to stain antigen and antibodies with a permanent stain which can be seen with the conventional light microscope even in old blocks of formalin-fixed tissues.

This technique has already proved to be useful in diagnosing treatment failure (if the test is positive in a patient and stays positive after his operation or other (x-ray) treatment, then the treatment was a failure) which should facilitate its wide application. A whole area for computerized scanning of sediments and tissues is opened up, since the labeled cells can be made to stand out clearly in contrast to the non-cancerous background. (Principal Investigator: John K. Lattimer, M. D., Sc.D.)

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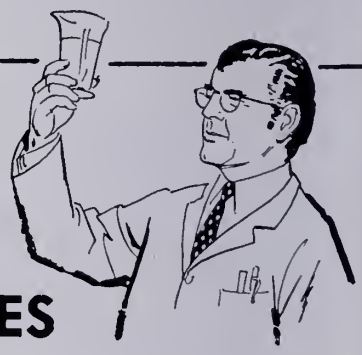
Researchers Analyze Human Milk For DDT Content

Concern has recently been expressed over the concentrations of DDT and its metabolites in human milk. *Researchers at Vanderbilt University, Nashville, Tennessee, analyzed human milk from women in seven U. S. cities for total DDT content.* The mean of 138 samples of milk from 101 donors was 0.17 ppm. This value is in excess of the World Health Organization's recommended maximum concentration in cows milk of 0.05 ppm. The use of commercial exterminators was associated with lower DDT levels than was personal home use of pesticides, and donors who used butter had lower concentrations of the DDT than those who used margarine. The investigators concluded that while no adverse effects in infants due to ingestion of DDT in human milk has been documented, a systematic monitoring of the pesticide is necessary.

Copper containing IUDs may prevent their users from contracting gonorrhea according to researchers at the Mt. Sinai School of Medicine, New York City. The investigators discovered that small amounts of metallic copper or its compounds, such as copper sulfate, can inhibit the growth of colonies of gonococci and destroy them in about thirty minutes. The use of copper-containing intrauterine devices and prophylaxis may guard against genital gonorrhea in women.



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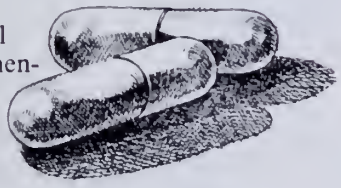

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ı ecautions: In elderly and debilitated, limit dosage to smallest (ective amount to preclude development of ataxia, overseda-) n or confusion (not more than two capsules per day initially; : rease gradually as needed and tolerated). Though generally (t recommended, if combination therapy with other psycho-) pics seems indicated, carefully consider individual pharma- (logic effects, particularly in use of potentiating drugs such as (AO inhibitors and phenothiazines. Observe usual precautions (presence of impaired renal or hepatic function. Paradoxical ı actions (*e.g.*, excitement, stimulation and acute rage) have (en reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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Let's Put The Family Doctor Back Into Our Small Towns

Not only in Alabama, but throughout the nation, there is an acute shortage of physicians, especially family physicians, and other health care specialists.

In 1930, 30 per cent of all physicians were practicing in the medical specialties, but by 1966 this had increased to 79 per cent. The resulting serious shortage of general practitioners has had a tremendous impact on the availability and accessibility of primary health care for millions of Americans.

During the 1969 session of the Alabama Legislature, the state authorized studies to investigate systematic expansion of medical education in Alabama.

The University of Alabama conducted a thorough investigation of medical education in the United States from 1969-1971. It concluded that any medical education program at the University should rely on the already-established basic science curricula and on the strong public service and extension program. It also concluded that it should utilize the health institutions in the area. And finally, it concluded that the program should complement, not duplicate, medical programs at Birmingham and the developing medical school at Mobile.

At present, Alabama's medical training centers are in metropolitan areas, which means that most of Alabama's physicians are in metropolitan areas. Since physicians tend to set up practices in the geographic areas in which they do their residency training, high quality medical training programs must be set up in smaller towns and cities to produce a greater distribution of physicians.

Four physicians serve 16,000 people in Fayette County and five physicians serve 20,000 people in Pickens County (which is a ratio of 1 to 4,000), three physicians serve 14,000 people in Bibb County (1 to 4,666) and three physicians serve 16,000 people in Hale County (1 to 5,333). This compares with the national average for physicians in non-metropolitan areas of one for every 1,400 people.

To attract more physicians back into the area of primary medical care, the "twentieth specialty"—family practice—was approved in 1969 by the American Medical Association. For this new specialty, family practice residency programs have been developing to train physicians to give patients continuous and comprehensive care. In addition to the traditional biological sciences, students training as family practice specialists have heavy emphasis on behavioral sciences to better understand people.

And so, The University of Alabama made subsequent commitments after its investigation:

1) To develop a clinical education program within a community setting by providing training and educational opportunities for undergraduate medical students from the University of Alabama in Birmingham, being also available to students from other schools.
2) To establish a clinical education program which will be particularly directed toward the development of family physicians who are concerned with preventive medicine and rehabilitation and with the need for total personalized health care.
3) To provide educational experiences within community settings that will give both comprehensive health care to the patient and continuing education opportunities to practitioners.
4) To develop, in cooperation with local hospitals and health care units, new health care delivery systems that can serve as models in meeting the medical needs of citizens.

(Continued on Page 288)

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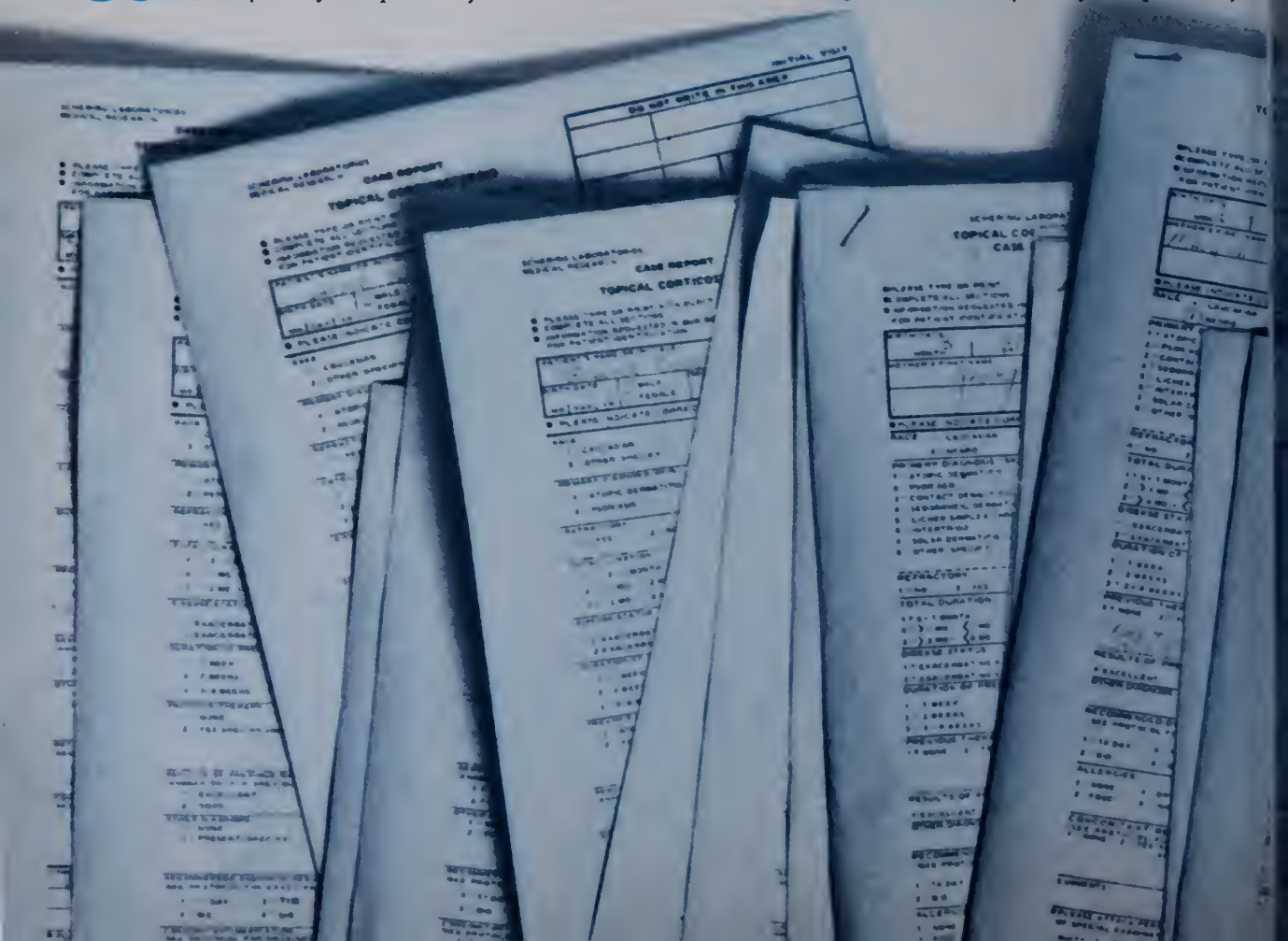

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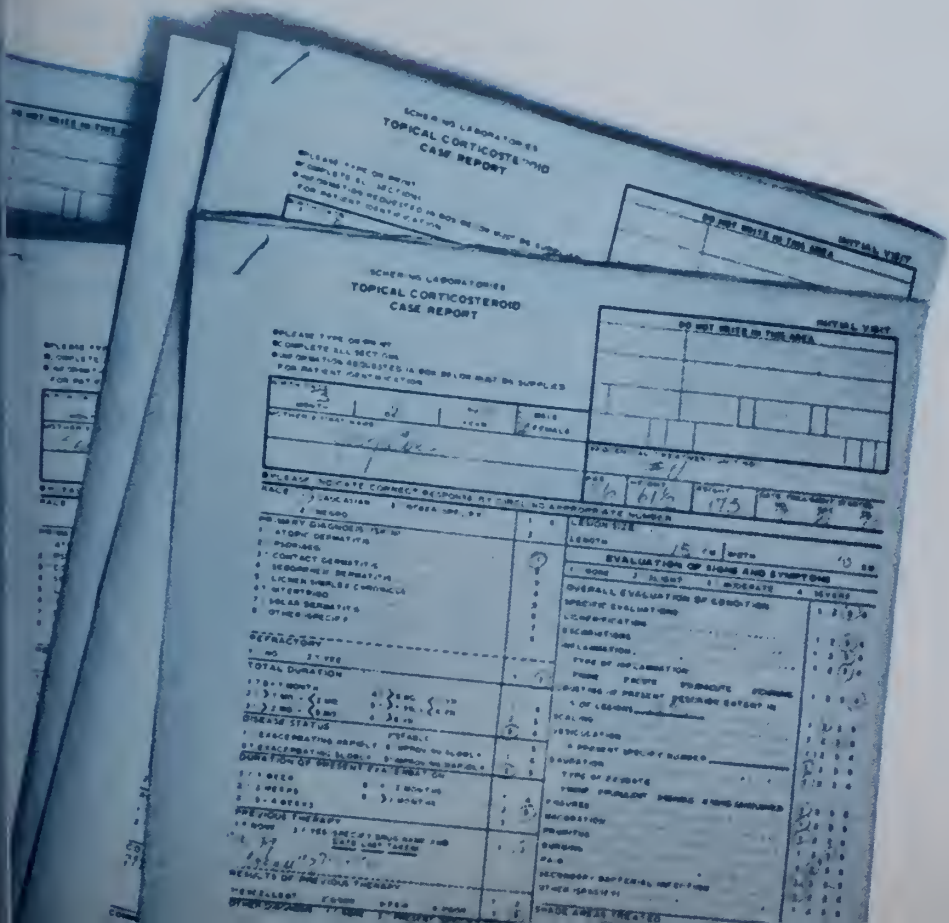

CLINICAL CONSIDERATIONS:

Description VALISONE products contain betamethasone valerate (9-fluoro-11β,17,21-trihydroxy-16β-methylpregna-1,4-diene-3,20-dione 17-valerate). Each gram of VALISONE Cream 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in a soft, white, hydrophilic cream of water, mineral oil, petrolatum, polyethylene glycol 10 monocetyl ether, cetostearyl alcohol, monobasi sodium phosphate, and phosphoric acid; 4-chloro-m-cresol is present as a preservative. E gram of VALISONE Ointment 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in an ointment base of liquid and white petrolatum, and hydrogenate lanolin. VALISONE Cream and Ointment contain no parabens.

Indications VALISONE Cream and Ointment are indicated for the relief of the inflammatory manifestations of corticosteroid-responsive dermatoses.

Contraindications VALISONE Cream an Ointment are contraindicated in vaccinia and varicella. Topical steroids are contraindicated i those patients with a history of hypersensitivit to any of the components of the preparation.

Precautions If irritation develops with the use of VALISONE Cream or Ointment, treatment should be discontinued and appropriate therapy instituted. In the presence of an infection, the use of an appropriate antifungal or antibacterial agent should instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled. If extensive areas are treate or if the occlusive technique is used, the possibility exists of increased systemic absorption the corticosteroid and suitable precautions sho be taken. Although topical steroids have not been reported to have an adverse effect on preg nancy, the safety of their use in pregnant femal has not been absolutely established. Therefore they should not be used extensively in pregnan patients, in large amounts, or for prolonged periods of time. VALISONE Cream and Ointment are not for ophthalmic use.

Adverse Reactions The following local adverse reactions have been reported with topical corticosteroids: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneform eruptions, and hypopigmentation. T following may occur more frequently with occlusive dressings than without such therapy: maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.

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For more complete details, consult Scheri literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

References: *(1) Files of Headquarters Medical Research Division, Schering Corporation. (2) Carter, V. H., and Noojm, R. O.: Curr. Therap. Res. 9:253, 1967. (3) Falk, M. S.: Cutis 2:788, 1966. (4) Goldblum, R. W.: Pennsylvania Med. 69:50, 1966. (5) Nierman, M. M.: J. Indiana M. A. 10:1184, 1966. (6) Zimmerman, E. H.: Arch. Dermat. 95:514, 1967.*

SLR

(Continued from Page 285)

5) To educate health care professionals who can effectively and efficiently handle most of the illnesses that now confront the physician in his daily practice.

A year ago, the University appointed Dr. William Robert Willard as dean of its new College of Community Health Sciences. Dr. Willard, who developed the medical education program at the University of Kentucky, received the American Medical Colleges Association's 1972 Flexner Award for his contributions to medical education. He is now responsible for developing a medical education program at the University, including the development of allied medical professions and the coordination of related undergraduate programs, clinical resources and funding sources.

Dr. Willard feels that there are two critical problems confronting medicine and the American people. The first concerns distribution of physicians. "With few exceptions," Dr. Willard said, "training takes place in big cities. High quality programs need to be developed in smaller towns and cities. If a medical student trains in a smaller town, he often finds he can practice good medicine and live a good life there. If more medical students make this discovery, a better geographic distribution should result. Here at the University we can give support to those in residence practicing family medicine in nearby towns."

The second problem concerns a balance between traditional specialty and primary physicians, especially family physicians. There cannot be just one or the other. As an offshoot of this second problem, there also needs to be a balance between physicians and those in supportive health positions. There are 12 to 15 other people needed in the health field for every physician. These people in supportive health positions can help physicians use their time to see more people.

Beginning this fall, a new health care management program is being offered at the University which will train people for several of these supportive health positions. A portion of the average physician's work-week hours are spent in managing, a field most doctors did not study in school. The bigger the health institution, whether hospital or clinic, the more necessary it becomes that someone who has been trained in management and also has some knowledge of the health field should assume the duties of manager, instead of doctors and nurses who have no management training.

Frank Hinckley, health care management program coordinator, said that students can major in dietetics, commerce, sociology, economics or another of the arts and sciences and then specialize in their fields taking the prescribed courses in health care management, all on an undergraduate level. Mr. Hinckley said that within the next few years the demand for these kinds of specialists will be tremendous.

Dr. Bobby G. Moore, assistant dean of the College of Community Health Sciences and associate professor of biology, stressed that at this time there are no plans for a four year medical school. Most of the medical students will be from medical schools in Birmingham and Mobile. A family practice clinic, scheduled to be completed in early 1974 across from Druid City Hospital in Tuscaloosa, will provide the students with a family practice setting. A temporary clinic is now open one block from the hospital.

In addition, the students will work in Druid City Hospital and other hospitals in the West Alabama region. Satellite training sites in Centreville and in Fayette will also be used. As the program develops, it will expand into other smaller communities.

Nott Hall, which housed the old medical school on campus before it was moved to Birmingham several decades ago, is scheduled to be renovated for classrooms and laboratory space for the College of Community Health Sciences.

Supplementary Security Income Program

Council on Medical Service Report F (A-73), "Medicare and Medicaid, 1973," submitted to this session of the House of Delegates, describes (in terms of its impact on Medicaid) a "new income maintenance program" for the needy aged, blind, and disabled. (Cf. pp. 10-11, Report F)

This program of "Supplementary Security Income for the Aged, Blind, and Disabled" (SSI), Title XVI of the Social Security Act, was established by P. L. 92-603 to become effective January 1, 1974. It will replace the current Title XVI, which permits states to combine their Public Assistance programs for the needy aged, blind, and disabled; on January 1, 1974, when the new program begins, Federal matching for these three Public Assistance categories will cease. (The program of Aid to Families with Needy Children remains in effect.)

As noted in Report F, the SSI program will provide each eligible individual with a minimum income of $1,560 per year; a couple, both of whom are eligible, will have a minimum income of $2,340 per year. Federal funds will be added to the eligible individuals' income from other sources to bring the total to the above levels. The program will be administered by a new Bureau of Supplementary Security Income established within the Social Security Administration. However, the Social Security Administration's (SSA) Bureau of Disability Insurance, which administers the Social Security disability benefit program in operation since 1956, will be involved in the determination of eligibility for SSI benefits.

In addition to income and resource qualifications, the law requires that those seeking benefits must be residents of the United States and either citizens or aliens permanently and legally residing in the United States. For eligibility under the "aged" category, such an individual need only be 65 years of age or older. The "blind" and "disabled" categories, however, have more complex eligibility criteria, involving medical evidence, and this aspect of eligibility determination will be administered by the Bureau of Disability Insurance.

Briefly, blindness or disability will be determined either by the standards now used by individual States in their Public Assistance programs—Aid to the Blind and Aid to the Permanently and Totally Disabled—or by nationwide standards contained in P. L. 92-603.

The State standards used will be those in effect for October 1972 (when P. L. 92-603 was enacted) and will render those on State program rolls in December 1973 eligible for SSI benefits. This mass inclusion of all those classified as needy and blind or disabled by State standards at the end of this year will, at the outset, require little more than a transfer of the rosters of the State programs to the Bureau of Supplementary Security Income. However, these individuals will remain eligible for the SSI grant only so long as they continue to meet the October 1972 State criteria. The Bureau of Disability Insurance, therefore, will need to obtain and maintain a file of such State eligibility standards for consultation should any of these recipients' condition improve in the future.

The national standards established by P. L. 92-603, which must be met by all other applicants (and to the Public Assistance recipients should they, at some time in the future, no longer meet the October 1972 State criteria) are, briefly:

Blindness: Defined as central visual acuity of 20/200 or less in the better eye, with the use of a correcting lens.

Disability: Defined, for adults, as inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death, or which has lasted (or can be expected to last) for a continuous period of not less than 12 months; and for children under 18, any medically

determinable physical or mental impairment of comparable severity.

The "physical or mental impairment" must be one which results from anatomical, physiological, or psychological abnormalities which are demonstrable by medically acceptable clinical and laboratory techniques.

The criteria set forth for disability are essentially those for the basic Social Security disability benefit program. Both involve a two-part definition of "disability"—(a) a medically determinable physical or mental impairment; and (b) the resultant "inability to engage in substantial gainful activity." As this House has recognized in the past, the "impairment" is a medical decision, but the "inability to engage in substantial gainful activity" is not.

In terms of the law, an individual is "disabled" only if the impairment is of such severity that he is not only unable to do his previous work, but cannot (considering his age, education, and work experience) engage in any other kind of substantial gainful work which exists in the national economy. Both the dollar amount defining "substantial" gainful activity and such occupational data as the type of work in which an applicant could engage and the availability of such work are non-medical questions.

This point should be specially noted. Any physician examining or submitting medical histories for applicants for SSI disability benefits should remember, and inform the applicant, that the physician testifies only to the "impairment," not to "disability." If disability income is not authorized, the physician need not assume his medical judgment has been overruled, and can make clear to the applicant that the decision is not based solely on the medical evidence provided.

The Bureau of Disability Insurance now handles most of the initial determination

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of disability through agreements with State agencies, usually the State vocational rehabilitation agency. The same State agencies will be handling most determinations in the new SSI program, although during the initial period the State welfare agency may also be involved in eligibility determination.

The State agencies now have some six hundred physicians handling the SSA load, about two hundred full-time. Estimates are that the caseload—for SSI and the existing disability benefit program—will more than double in 1974, from 300 thousand claims handled in 1972 to three-quarters of a million in 1974, with about a quarter of this caseload expected to be in the Southeastern States.

As a result, a doubling of the number of full- and part-time physician staff in these agencies appears necessary. Significantly more input from physicians in private practice will also be needed. Applicants under the SSI program may tend to have less adequate medical records than those now obtaining benefits through Social Security covered employment. The Bureau of Disability Insurance is currently paying for additional medical evidence in about 20 per cent of Social Security disability applications submitted; for the SSI program, a higher percentage is expected.

According to the Bureau, State agencies will be contacting local physician organizations and individual physicians to enlist their understanding, participation, and cooperation in the new program. The Bureau itself is seeking the cooperation of the profession through the American Medical Association and the Council.

The Council on Medical Service, through its Committee on Government Medical Services, has maintained a long-standing and productive liaison with the Bureau of Disability Insurance for over a decade. Indeed, the Council's Sixth Annual Medical Services Conference, presented at the 1963 Clinical Meeting of this House, included a segment on the "Federal Disability Benefit Program" developed jointly with the Bureau, and the Bureau's handbook for physicians on "Disability Evaluation under Social Security," a detailed compilation of the criteria used in determining impairment, was reviewed prior to publication in 1969 and contains an introductory letter of commendation from the Council.

The Council on Medical Service therefore presents this report to the House for its information, and for the information of medical associations and individual physicians who may be contacted in coming months by their respective state agencies to seek their cooperation in the implementation of the SSI program on January 1, 1974. The Council will continue its liaison with the Bureau of Disability Insurance, and will provide a channel for comments and inquiries from physicians and medical associations.

On the basis of past experience with the Bureau, the Council believes this program will merit the profession's interest and cooperation.

Excerpt from report of Reference Committee A, 1973 Annual Convention:

"(22) COUNCIL ON MEDICAL SERVICE REPORT J — SUPPLEMENTARY SECURITY INCOME PROGRAM

CMS Report J describes a new Federal program, enacted by PL 92-603, which will replace Federal-State cash assistance programs for the needy aged, the needy blind and the needy disabled. Beginning January 1, 1974, a new Federal minimum income program for these three needy groups will begin, administered by the Social Security Administration.

"The Council report describes the program, with particular emphasis on aid to the blind and disabled, and the potential role of physicians in determining eligibility.

"In view of the potential size of this program, and physician involvement, the Committee feels this report will be of interest to the profession at large; and commends the Council for its detailed study.

"RECOMMENDATION:

Mr. Speaker, your Reference Committee Recommends that CMS Report J be filed and given wide dissemination."

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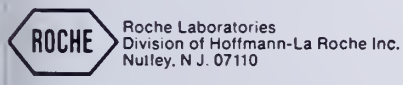

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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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(Terms expiring December 31 of year shown.)

1973
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acute arthritic inflammation...heat that freezes

In acute rheumatoid arthritis consider Tandearil. The anti-inflammatory action of Tandearil quickly helps reduce heat, pain, swelling, and stiffness. Results are usually seen in 3 or 4 days. Try it for a week when the symptoms defy aspirin control.

Remember that Tandearil is not a simple analgesic. It should not be used on patients responding to routine therapy. Before using, please read the prescribing information. It's summarized below.

Tandearil® helps take the heat off

oxyphenbutazone NF

Geigy

Tablets of 100 mg.
Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia: history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
(B)98-146-800-F (10/71)
For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

TA 9041

More than sleep

your choice of sleep medication is wisely based on more than sleep-inducing potential

sleep with relative safety

Chronic tolerance studies have confirmed the relative safety of Dal (flurazepam HCl); no depression of cardiac or respiratory fun was noted in patients administered recommended or higher c for as long as 90 consecutive nights.

In most instances when adverse reactions were reported, they were mild, infrequent and seldo quired discontinuance of therapy. Morning "hang-over" with Dalmane has been relatively infrequent. ness, drowsiness, lightheadedness and the like have been the side effects noted most frequently, particularly in the elderly and debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

sleep for 7 to 8 hou without need to repeat dosage

No sleep r cation has been as rigorously evaluated in the sleep research laboratory as Dalmane. Insomnia pa given one 30-mg capsule of Dalmane at bedtime, on average: fell asleep within 17 minutes, had fewer r time awakenings, spent less time awake after sleep onset, and slept for 7 to 8 hours with no need to re dosage during the night.

eep with nsistency

Dalmane has been shown to be consistently effective even during consecutive nights of administration, with no need to increase dosage.

almane (flurazepam HCl) is a distinctive sleep medication—a diazepine specifically indicated for insomnia. It is not a barte or methaqualone, nor is it related chemically to any other ble hypnotic.

hen your evaluation of insomnia indicates the need for a sleep cation, consider Dalmane—a single entity nonnarcotic, nonurate agent proved effective and relatively safe for relief of nia.

DALMANE®
(flurazepam HCl)

When restful sleep is indicated

One 30-mg capsule *h.s.*—usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage, 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE

ROCHE LABORATORIES
Div., Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

The Weight of Professional Opinion

It's time for action to defend the laws and regulations that protect your patients against drug substitution.

These professional and trade organizations are united in supporting antisubstitution statutes and regulation

The American Academy of Dermatol

The Board of Directors of the American Academy of Family Physicians

The Executive Board of the American Academy of Neurology

The Committee on Drugs of the American Academy of Pediatrics

The American College of Allergists

The Executive Committee of the American College of Obstetricians and Gynecologists

The Board of Regents of the American College of Physicians

The Board of Trustees of the American Dental Association

The Board of Trustees of the American Medical Association

The American Psychiatric Associa

The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

nt Statement on Antisubstitution Laws and Regulations

The purpose of this statement is ffirm the support of the participat- organizations for the laws, regula- s and professional traditions which hibit the unauthorized substitution rug products.

Traditionally, physicians, den- s and pharmacists have worked peratively to serve the best inter- s of patients. Productive coopera- n has been achieved through tual respect as well as a common cern for the ideals of public vice. This mutual respect has been ected, in part, by joint support r the years for the adoption and orcement of laws and regulations cifically prohibiting unauthorized stitution and encouraging joint cussion and selection of the rce of supply of drug products. basic principles of medical, den- and pharmacy practice are thus ized and preserved in the interest atient welfare.

The antisubstitution laws have obstructed enhancement of the fessional status of pharmacy any re than they have in and of them- ves guaranteed absolute protec- from unsafe drugs, or freed sicians, dentists and pharmacists m their responsibilities to patients. a practical matter, however, such s and regulations encourage inter- fessional communications regard- drug product selection and assure h profession the opportunity to rcise fully its expertise in drug ge, to the advantage of patients.

Physicians and dentists should urged to increase the frequency d regularity of their contacts with armacists in selection of quality g products, recognizing that economies to patients can be improved through such communication, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selection remain primary and do not permit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthorized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D. C. 20005

ROCHE announces new BACTRIM™

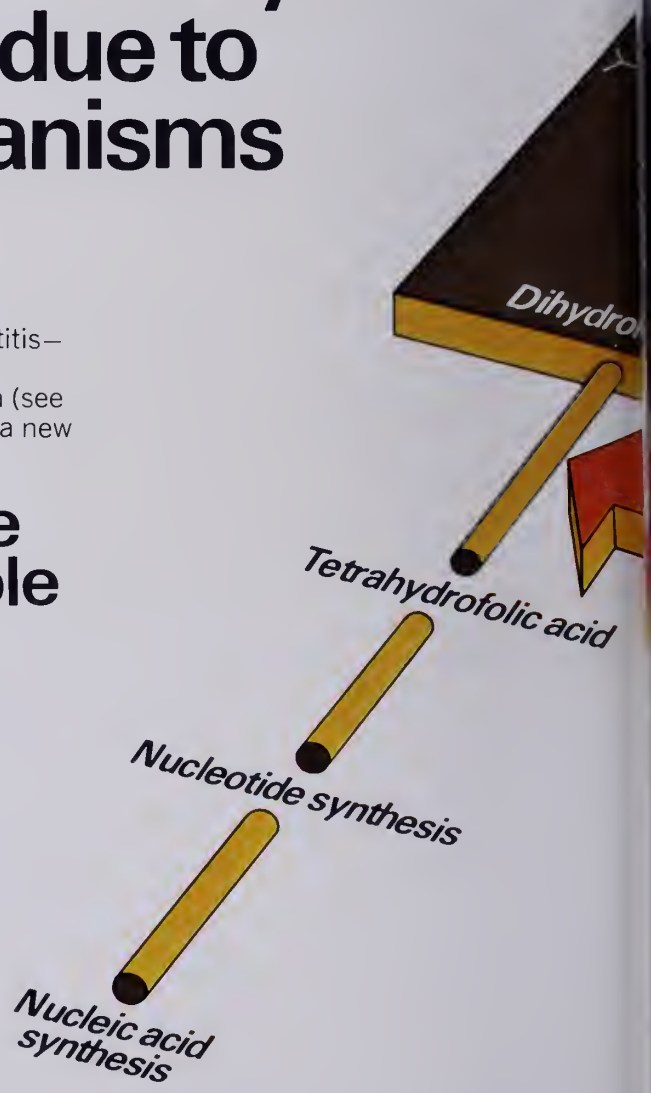
Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

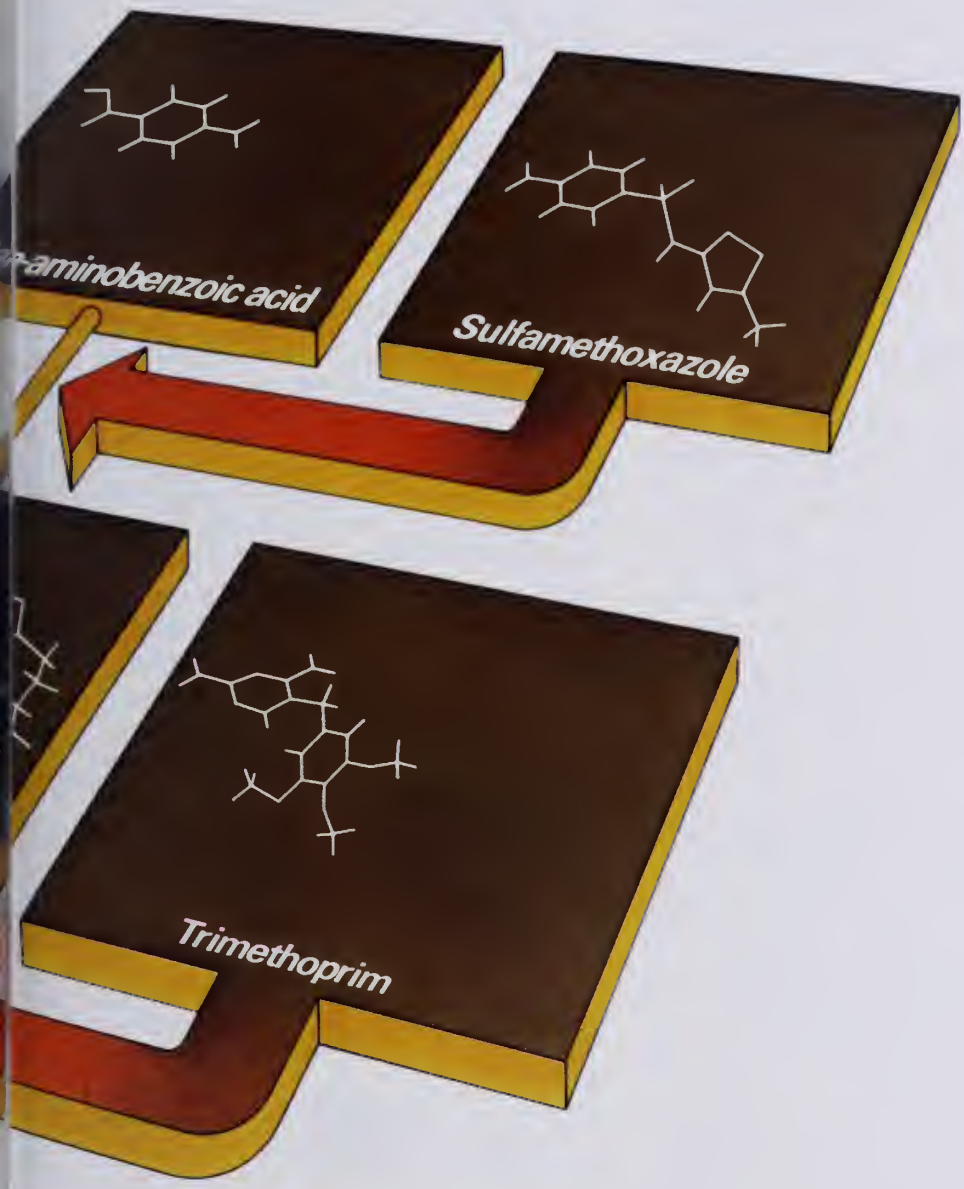
a new type of antibacterial for a two-pronged attack against chronic urinary tract infections due to susceptible organisms

Bactrim is highly effective in the treatment of these infections—primarily pyelonephritis, pyelitis and cystitis—when due to susceptible organisms. This efficacy is related to the unique mode of action against bacteria (see illustration), an action that, in effect, makes Bactrim a new type of antibacterial.

Bactrim interrupts the life cycle of susceptible bacteria

Unique mode of action interrupts the life cycle at two important points, thereby impeding the production of nucleic acids and proteins essential to these bacteria. These consecutive interruptions occur because sulfamethoxazole and trimethoprim resemble naturally existing substrates. By competitive replacement of these substrates, they inhibit further synthesis.





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new BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

Before prescribing, please see complete product information on last page of advertisement.

Excellent clinical response in chronic urinary tract infections even with obstructive complications

A multiclinic, double-blind study* of response to a ten-day course of therapy in 471† patients with chronic urinary tract infections demonstrated the superiority of Bactrim. On the 10th day after initiation of therapy, 91.7% (of 168 patients) showed significant bacteriological response to Bactrim, compared with 81.2% (of 144 patients) to trimethoprim and 64.5% (of 155 patients) to sulfamethoxazole. More than half of these patients had obstructive complications.

Excellent response maintained

Bactrim proved equally impressive in maintaining this bacteriological response. In the above study, after a ten-day course of therapy with Bactrim, 68.4% of patients with chronic urinary tract infections *maintained* response for up to 42 consecutive days, compared with 59.7% with trimethoprim and 44.4% with sulfamethoxazole. These results are particularly noteworthy considering the number of patients with obstructive complications—cases regarded as being notoriously difficult to treat.

Prescribing considerations

Clinical Limitations: Currently, the increasing frequency of resistant organisms is a limitation of th usefulness of all antibacterial agents, especially in the treatment of chronic and recurrent urinary tract infections. Not recommended for children under twelve.

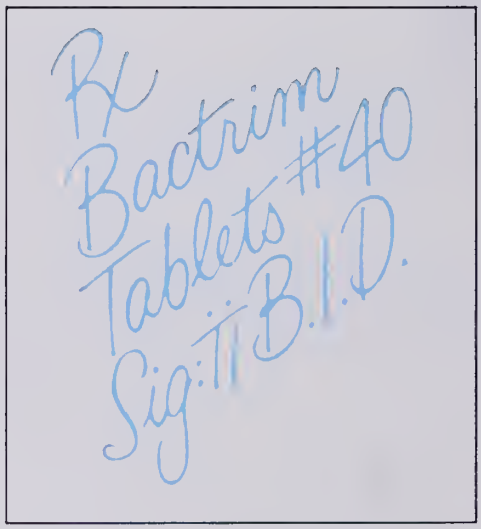
Contraindications: Hypersensitivity to trimethopr or sulfonamides. Pregnancy and during the nursing period.

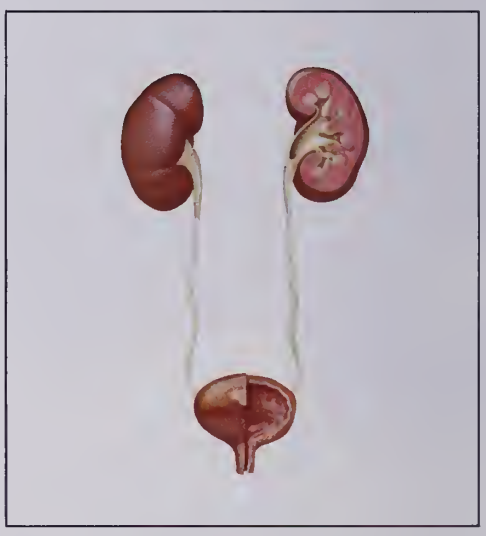
Warnings and Precautions: Both sulfamethoxazol and trimethoprim have been reported to interfere with hematopoiesis. Complete blood counts shou be done frequently. If a significant reduction in th count of any formed blood element is noted, Bactr should be discontinued. Bactrim should be given with caution to patients with impaired renal or hepatic function, possible folate deficiency, sever allergy or bronchial asthma. Maintain adequate fluid intake. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Effects: Among the most common side effects are nausea, vomiting, rash, leukopenia an elevations in SGOT and creatinine.

Usual adult dosage: two tablets every twelve hou for 10 to 14 days; no loading dose required.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 0711
†4 patients not available for evaluation at day 10.





new **BACTRIM**™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

for chronic urinary tract infections

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, N J 07110

Before prescribing, please consult complete product information on facing page.

nete Product Information:

ɔtion: Bactrim is a synthetic antibacterial combination prod-
, vailable in scored light-green tablets, each containing 80 mg
ɔoprim and 400 mg sulfamethoxazole.

ɔ hoprim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine.
, white to light-yellow, odorless, bitter compound with a molec-
eight of 290.3.

ethoxazole is N^1-(5-methyl-3-isoxazolyl) sulfanilamide. It is
ost white in color, odorless, tasteless compound with a mo-
weight of 253.28.

ɔ: *Microbiology:* Sulfamethoxazole inhibits bacterial synthesis
ydrofolic acid by competing with *para*-aminobenzoic acid.
hoprim blocks the production of tetrahydrofolic acid from di-
olic acid by binding to and reversibly inhibiting the required
e, dihydrofolate reductase. Thus, Bactrim blocks two con-
e steps in the biosynthesis of nucleic acids and proteins
ial to many bacteria.

ɔ studies have shown that bacterial resistance develops more
with Bactrim than with trimethoprim or sulfamethoxazole

ɔ serial dilution tests have shown that the spectrum of anti-
ial activity of Bactrim includes the common urinary tract
ens with the exception of *Pseudomonas aeruginosa*. The fol-
organisms are usually susceptible: *Escherichia coli, Kleb-
Enterobacter, Proteus mirabilis* and indole-positive proteus
s.

Representative Minimum Inhibitory Concentration Values for Bactrim-Susceptible Organisms
(MIC—mcg/ml)

ria	Trimeth-oprim alone	Sulfameth-oxazole alone	TMP/SMX (1:20) TMP	SMX
richia	0.05—1.5	1.0 —245	0.05—0.5	0.95— 9.5
s spp. positive	0.5 —5.0	7.35 —300	0.05—1.5	0.95—28.5
ilis	0.5 —1.5	7.35 — 30	0.05—0.15	0.95— 2.85
iella-obacter	0.15—5.0	0.735—245	0.05—1.5	0.95—28.5

n *Pharmacology:* Bactrim is rapidly absorbed following oral
istration. The blood levels of trimethoprim and sulfamethoxa-
e similar to those achieved when each component is given
Peak blood levels for the individual components occur one
hours after oral administration. The half-lives of sulfameth-
e and trimethoprim, 10 and 16 hours respectively, are rela-
he same regardless of whether these compounds are admin-
as individual components or as Bactrim. Detectable
ts of trimethoprim and sulfamethoxazole are present in the
24 hours after drug administration. Free sulfamethoxazole
methoprim blood levels are proportionately dose-dependent.
eated administration, the steady-state ratio of trimethoprim
amethoxazole levels in the blood is about 1:20.

ethoxazole exists in the blood as free, conjugated and pro-
ound forms; trimethoprim is present as free, protein-bound
etabolized forms. The free forms are considered to be the
eutically active forms. Approximately 44 percent of trimeth-
and 70 percent of sulfamethoxazole are protein-bound in the
The presence of 10 mg percent sulfamethoxazole in plasma
ses the protein binding of trimethoprim to an insignificant
; trimethoprim does not influence the protein binding of
ethoxazole.

ion of Bactrim is chiefly by the kidneys through both glomer-
ltration and tubular secretion. Urine concentrations of both
ethoxazole and trimethoprim are considerably higher than
e concentrations in the blood. When administered together
Bactrim, neither sulfamethoxazole nor trimethoprim affects
inary excretion pattern of the other.

tions: Chronic urinary tract infections (primarily pyelonephri-
elitis and cystitis) due to susceptible organisms (usually
i, Klebsiella-Enterobacter, Proteus mirabilis, and, less fre-
y, indole-positive proteus species).

**tant note: Currently, the increasing frequency of resistant organ-
s a limitation of the usefulness of all antibacterial agents, espe-
n the treatment of chronic and recurrent urinary tract infections.**

indications: Hypersensitivity to trimethoprim or sulfonamides.
ancy and during the nursing period (see Reproduction
s).

gs: Deaths associated with the administration of sulfonamides
een reported from hypersensitivity reactions, agranulocyto-
lastic anemia and other blood dyscrasias. Experience with
hoprim alone is much more limited, but it has been reported
erfere with hematopoiesis in occasional patients. In elderly
ts concurrently receiving certain diuretics, primarily thia-
an increased incidence of thrombopenia with purpura has
eported.

The presence of clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts should be done frequently in patients receiving Bactrim. If a significant reduction in the count of any formed blood element is noted, Bactrim should be discontinued.

At the present time, there is insufficient clinical information on the use of Bactrim in infants and children under 12 years of age to recommend its use.

Precautions: Bactrim should be given with caution to patients with impaired renal or hepatic function, to those with possible folate deficiency and to those with severe allergy or bronchial asthma. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis may occur. This reaction is frequently dose-related. Adequate fluid intake must be maintained in order to prevent crystalluria and stone formation. Urinalyses with careful microscopic examination and renal function tests should be performed during therapy, particularly for those patients with impaired renal function.

Adverse Reactions: For completeness, all major reactions to sulfonamides and to trimethoprim are included below, even though they may not have been reported with Bactrim.

Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia.

Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis.

Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis.

C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness.

Miscellaneous reactions: Drug fever, chills, and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L. E. phenomenon have occurred.

The sulfonamides bear certain chemical similarities to some goitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents. Rats appear to be especially susceptible to the goitrogenic effects of sulfonamides, and long-term administration has produced thyroid malignancies in the species.

Dosage and Administration: Not recommended for use in children under 12 years of age.

The usual adult dosage is two tablets every 12 hours for 10 to 14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

How Supplied: Tablets, containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10. Imprint on tablets: ROCHE 50.

Reproduction Studies: In rats, doses of 533 mg/kg sulfamethoxazole or 200 mg/kg trimethoprim produced teratological effects manifested mainly as cleft palates. The highest dose which did not cause cleft palates in rats was 512 mg/kg sulfamethoxazole or 192 mg/kg trimethoprim when administered separately. In two studies in rats, no teratology was observed when 512 mg/kg of sulfamethoxazole was used in combination with 128 mg/kg of trimethoprim. However, in one study, cleft palates were observed in one litter out of 9 when 355 mg/kg of sulfamethoxazole was used in combination with 88 mg/kg of trimethoprim.

In rabbits, trimethoprim administered by intubation from days 8 to 16 of pregnancy at dosages up to 500 mg/kg resulted in higher incidences of dead and resorbed fetuses, particularly at 500 mg/kg. However, there were no significant drug-related teratological effects.

BACTRIM™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

President's Page

Report To The Membership

The recently-adjourned legislative session resulted in the passage of very few bills which concerned the Medical Association of this state. The principal exception was the passage of the bill reconstituting the Committee on Public Health. The bill which passed was much like the one recommended by our own study commission in that the Committee will be composed of 12 physicians and four chairmen who will be elected by the various groups outlined in the study commission's bill. I think this might have been the very best compromise we could have hoped for under the circumstances. In fact, in time it may prove to be a real asset to the public health of the people of this state.

We met again in Atlanta to hear the latest information on the PSRO Program. Your President was somewhat disappointed in that there was very little new material presented. It seems that even the higher echelon in Washington cannot agree on many of the proposed regulations which are to come down to the various associations. It would occur to me that about all we can hope for in the near future is the designation of an area PSRO. As you know, your association has asked for a single PSRO with the thought that in the future it might be necessary to create further subdivisions. But, we felt that it would be much more manageable and sensible to begin with one central PSRO. We do not know at this time whether or not the Secretary of Health, Education and Welfare is going to approve this request. We are aware that there is considerable pressure against granting states the size of ours a single PSRO. It would also occur to me that it will probably be years before we have a program with sharp guidelines. I would suspect that we would operate in the beginning, more or less, by letter of suggestions as to how to manage the PSRO cases.

DR. CAMP

Your Committee on Constitution and By-laws is now busily engaged in drafting a new constitution and bylaws for this association. Dr. E. B. Glenn in Birmingham is chairman of that committee. I hope that any member of this association who has suggestions as to how we can improve our association would please send your suggestion in a letter to Dr. Glenn. I am sure these suggestions will be seriously considered by the Committee.

The job of rewriting the Constitution is an extremely difficult one and I am sure the committee needs the help of all members. As you probably know, our present Constitution is very old and deletes many things which should be spelled out in detail. There have been many changes in our association in the past few years and we certainly need to have a constitution which is specific and up to date in as far as it is humanly possible to make it.

E. E. Camp, M. D.
President

Association Sponsored Insurance is working in 50 out of the 50 states (That's a pretty good average!)

. . . All kinds of associations throughout the country have used their collective bargaining power to provide their members with sound, realiable insurance protection at favorable, stabilized rates. The same is true of some medical associations. For example, in New York the medical association and Employers Insurance of Wausau have provided stabilized malpractice insurance coverage for over 23 years. Now we can offer this same reliable protection, based **solely** on Alabama loss experience, to you. For further information on additional benefits, contact

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THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA · 1873 ·

The Woman's Auxiliary

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Mental Health And Our Tensions

According to the National Association for Mental Health, Inc., many people, when they hear the term mental health, think first of mental illness. But mental health is far more than the absence of mental illness.

Mental health is something all of us want, whether we know it by name or not. When we speak of happiness, or peace of mind, or enjoyment, or satisfactions, we are talking about mental health.

Mental health is a part of everybody's everday life. It means the over-all way that people get along—in their families, at school, on the job, at play, with their associates, in their communities. It is the way that each person harmonizes his desires, ambition, abilities, ideals, feelings and his conscience in order to meet the demands of life as he has to face it. It is how you feel about yourself, how you feel about other people, and how you are able to meet the demands of life.

One phase of our daily life is dealing with our tensions. Anxiety and tension are essential functions of living, just as hunger and thirst are. Without the experience of anxiety we would not be prepared to avoid or overcome situations harmful to us and our families. Without the ability to tense ourselves we would fall short in emergencies, often to the peril of our lives. Tension serves, too, as a stimulating source of excitement. It is to gain this kind of pleasure that we play or watch competitive games, pursue adventurous outdoor recreation and follow drama on stage, screen or television.

Primarily, tensions and anxiety are our self-protective reactions when we are confronted by threats to our safety, well-being, happiness and self-esteem—threats such as illness, accidents, violence, financial trouble, trouble on the job, trouble in family relations. Life today is much more complex. Many conflicting demands are made on us. Everybody is confronted by threats and everybody experiences tensions. Yet there are also times when we become tense and anxious where no adequate threat exists. This may happen when we have been through a siege of trouble or exhausting work and cannot reason things properly or control our feelings as we do when we are rested and in good condition.

MRS. GRADY

The average human being has the capacity to live through emotionally upsetting situations—even crises—and to bounce back when they are over.

Here are a few simple things we can do to help us cope with tension:

Talk out the problem with some level-headed person you can trust as this often

(Continued on Page 308)

caring better for his basic needs, less confused in his thinking; no great accomplishment for most people, but a significant advance for the patient with cerebral arteriosclerosis*

Now Available for Alabama Medicaid-Patients

Hydergine®

SUBLINGUAL TABLETS containing 0.167 mg. dihydroergocornine methanesulfonate, 0.167 mg. dihydroergocristine methanesulfonate, and 0.167 mg. dihydroergokryptine methanesulfonate

helps patients with cerebral arteriosclerosis do little things better

The usual dosage is four to six sublingual tablets daily. The patient's improvement with Hydergine is usually demonstrated in four to six weeks. Some nasal stuffiness due to adrenergic blockade, transient nausea or gastric disturbances have been reported with high dosages.

***Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indication as follows:

"Possibly" effective: The treatment of cerebral arteriosclerosis and dizziness, mood changes, nocturnal cramps, and paresthesias in the aged.

Final classification of the less-than-effective indications requires further investigation.

72-438R

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936 SANDOZ

(Continued from Page 306)

helps you to see what you can do about it. Escape for a while and lose yourself in a movie or a book or a game, or a brief trip for a change of scene.

Work off your anger by pitching into some physical activity like gardening, cleaning out the garage, carpentry or some do-it-yourself project.

Stand your ground on what you know is right, but do so calmly and make allowance for the fact that you could turn out to be wrong.

If you feel yourself worrying about yourself all the time, try doing something for somebody else.

Take one thing at a time. The surest way to do this is to take a few of the most urgent tasks and pitch into them, one at a time, setting aside all the rest for the time being. No one can be perfect in everything. Decide which things you do well, and then put your major effort into these. Instead of being critical about another person's behavior, search out the good points and help develop them. When you give the other fellow a break, you very often make things easier for yourself; if he no longer feels you are a threat to him, he stops being a threat to you.

Make yourself available instead of shrinking away and withdrawing and always waiting to be asked.

Everyone should have a hobby that absorbs him in off hours. The quest for peace of mind—or for good mental health is universal. We have to work to achieve it. This means striving for a better understanding of ourselves and other people, and using this understanding in working out more satisfying relationships. It means working out our problems by ourselves when we can, and seeking the assistance of others when help is needed. It means finding the proper social and medical services in our communities to help us with the problems we cannot handle alone.

Betty Grady

Betty Grady, President

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512

When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

ies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended.

Panalgesic©

RELIEVES PAIN

Usage: Apply where it hurts with gentle massage. May be repeated as often as necessary. A first aid in injuries, relieving pain and discouraging infection. Useful in industrial clinics—collegiate and professional athletic training programs.

**You may request a clinical supply.*

Dispensed in 4 oz. bottles, 6 oz. aerosol spra pint and half gallon bottles.

WILLIAM P. POYTHRESS & COMPANY, INC. RICHMOND, VIRGINIA 23 1

Health Care Management Program Offered At University Of Alabama

As part of the University of Alabama program to help improve health care for Alabamians, a new health care management program will train people for supportive health positions.

The health care field is expected to be the largest in the country by 1980. The new health care management program offers The University of Alabama student the chance to specialize on the undergraduate level, whether he's majoring in commerce, sociology, economics or another of the arts and sciences, so that he can use his major in a health-related field.

And this is what Frank Hinckley, health care management coordinator, stresses to the hundreds of prospective students he talks with all over the state.

"This program is really going to blossom as soon as people realize what it offers," Mr. Hinckley said. The first of its kind in the state of Alabama, health care management is an interdisciplinary program.

The four year program requires 130 hours of course work, leading to a bachelor of arts degree. The program provides the student maximum flexibility in planning his education.

A student may select an area of concentration from a number of colleges within the University. For example, a student who wishes to be a dietitian would complete the basic requirements in the School of Home Economics. Or a person who wishes to be an accountant would complete the core requirements in the College of Commerce and Business Administration. Or a person who wishes to become a health planner would complete the basic requirements in the Department of Political Science.

In addition, all students are required to take a set of prescribed courses in liberal arts, public sector management and health care management, giving them a field of specialization within their majors.

Making its debut this fall, health care management responds to the anticipated boom in the health industry and the shortage of qualified personnel within the industry. In a study completed last year, the University found that the need for management personnel will increase significantly within the next few years.

For instance, already there is an acute shortage of physicians in the state of Alabama. In Pickens County, five physicians serve 20,000 people. In Bibb County, three physicians serve 14,000. And in Coosa County there are no physicians at all.

The average physician in Alabama works 20 hours over the normal work week. A portion of these hours are spent in managing, a field most doctors and nurses never studied in school. Additional people need to be in supportive health positions that can help physicians see more people.

The bigger the health institution, whether hospital or clinic, the more necessary it becomes that someone who has been trained in management and has some knowledge of the health field should assume the duties of management.

In a survey underwritten by the University, 150 administrators of varied health institutions from throughout Alabama indicated that more than 500 middle-level managers will be needed for the next five years.

Not only did this survey show that there was a shortage of health managers in Alabama, it also revealed that there was a great need for short courses, certificate and undergraduate programs to train these managers.

Presently, a certificate program is being developed, so that nurses and other people already in the health care field can return to the University to specialize in health care management.

Because of the diversity and number of health care institutions, people from many

(Continued on Page 348)

Reapportionment—Get Involved!

Your state government has changed. Established legislative patterns no longer exist. The next Legislature—reapportioned by Federal court action after legislative inaction—will have new origins.

It is impossible to say whether this newly-composed legislature—without medical effort—will be more or less attuned to the problems of medicine than its' predecessors. But one thing is certain. Doctors, with their enormous civic influence, have a unique and perhaps evanescent opportunity to influence the composition of this new legislature and to instill in it an awareness of society's medical needs.

Action is required, and time, and effort, and total involvement.

Members of MASA recently received a summary of the status of health legislation at the close of the 1973 Regular Session of the Alabama Legislature. It is hoped that doctors will read the study carefully and note the areas of failure as well as the areas of success. Also included in the report is the vote on key issues. Where lack of strong support, apathy, or hostility existed regarding bills affecting health, it should be carefully considered by each MASA member.

Re-apportionment provides the opportunity to rectify old problems by sending to Montgomery strong, capable and dedicated men—men whose interests serve the best interests of Alabama's 3.5 million citizens.

Medicine in Alabama today, more than ever, needs friends of Medicine serving in the legislature.

Candidates seeking re-election or seeking new posts in the Alabama House and Senate need to know your views. They need your support. They need your encouragement. They also need to be reminded that election to public office is a public trust and that physicians, individually and collectively, will keep a watchful eye on how this trust is discharged.

Our message may literally involve the survival of man; but voices in an unpopulated forest will not help man survive.

Page 1

U.S. POSTAL SERVICE
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(Act of August 12, 1970 Section 3685 Title 39 United States Code)

SEE INSTRUCTIONS ON PAGE 2 (REVERSE)

1. TITLE OF PUBLICATION: THE JOURNAL OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA
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NAME	ADDRESS
Non-Profit Organization	
Medical Association of the State of Alabama	19 South Jackson St., Montgomery, Ala.

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Medical Clinic Board of the City of Montgomery, Alabama-Midtown	Montgomery, Ala.

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PS Form 3526 July 1971

walking

widened Man's hunting range but increased blood pressure in hemorrhoidal veins

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til the inflammation
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ɜdiately following each
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to help ease acute symptoms of hemorrhoids **Anusol·HC®**

Hemorrhoidal Suppositories with Hydrocortisone Acetate. On your Rx only!
Each suppository contains hydrocortisone acetate 10 mg; bismuth subgallate 2.25%; bismuth resorcin compound 1.75%; benzyl benzoate 1.2%; Peruvian balsam 1.8%; zinc oxide 11.0%; and boric acid 5.0%; plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base containing cocoa butter.

for long-term patient comfort **Anusol®**

Suppositories and Ointment Each suppository or gram of ointment contains the active ingredients of an Anusol-HC suppository minus the hydrocortisone.

Warner/Chilcott

Division,
Warner-Lambert Company
Morris Plains, New Jersey
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ANGP-35

Gantanol® (sulfamethoxazole) and

0.1 M.I.C. for three hours
Similar elongations occur regardless of antibacterial used.

1.0 M.I.C. for three hours
Similar midcell defects seen with increased antibacterial concentrations.

10 M.I.C. for three hours
Similar spheroplast-like forms appear with high concentrations of the antibacterials.

E. coli + sulfamethoxazole

E. coli + tetracycline

The Scanning Electron Microscope (SEM) reveals the efl c

The *in vitro* experiment. These SEM photomicrographs were taken as part of a study exploring the effects of various antibacterials with different modes of action on the surface morphology of bacteria. The scanning electron microscope was used because of its ability to show three-dimensional views of organisms, enabling better definition and appreciation of surface morphology.

For this portion of the experiment, *E. coli* were exposed to the following agents: sulfamethoxazole, a chemical drug which acts by interference with para-aminobenzoic acid utilization; tetracycline, whicl nt feres with intracellular protein synthesis; and cep - lothin and ampicillin, which are cell-wall-active c g

Strains of *E. coli,* each susceptible to the respe ve antibacterials, were exposed for 15, 30, 60, 120 a 180 minutes and 18 hours to several concentratio of each agent.

Following the 180-minute or three-hour expos es to the antibacterials at 0.1 M.I.C., 1.0 M.I.C. and 10 M.I.C., photoscans of the *E. coli* were taken. A shown above, regardless of the antibacterial agen used or its mode of action, the changes in surface morphology were remarkably similar . . . elongati at low drug concentrations, midcell defects at hig r

ree-Dimensional World of SEM

E. coli + cephalothin

E. coli + ampicillin

ertain antibacterials on bacterial surface morphology

trations and ultimate progression to sphero-
ke forms.[1]

interpretation. "At present, the significance of
bservations in clinical infection must be con-
l with caution, but it is hoped that these data
mulate a reevaluation of present concepts of
ure and role of morphological variants of bac-
posed to a variety of antibacterial factors."[2]

**ould be noted that this information represents
vitro research. No clinical significance can
wn from this study concerning the effective-
ness of any of the agents discussed, as it is not possible to extrapolate *in vitro* data to humans. This information is presented to demonstrate the continuing research activities in the area of antibacterials, particularly modes of action and surface morphology.**

[1]Data on file, Hoffmann-La Roche Inc., Nutley, N.J.
[2]*Antimicrob. Agents Chemother., 1*:164, 1972.

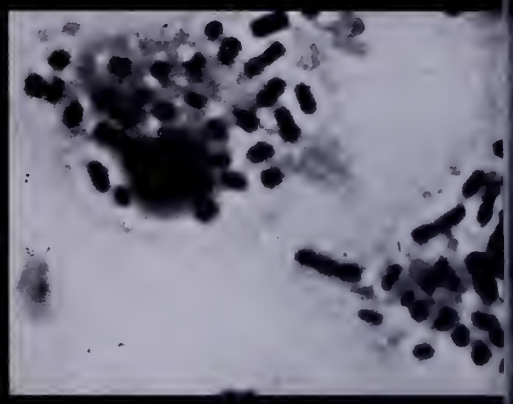
See next two pages for product information.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

Observations fro

E. coli—Fluorescent stain



Klebsiella sp.—Stain to define capsular envel

■ **Effective control of primary susceptible bacterial offenders**

Gantanol® (sulfamethoxazole) is effective against susceptible strains of *E. coli,* the most com cause of urinary tract infections. It is also highly effective against other susceptible gram-neg and gram-positive organisms, usually *Klebsiella-Aerobacter, Staph. aureus* and *Proteus mira*

■ **Prompt antibacterial blood and urine levels—in from 2 to 3 hours**

Antibacterial levels of Gantanol usually appear in blood and urine in from 2 to 3 hours after th initial 2-Gm adult dose. This rapid initiation of effective antibacterial activity enables prompt t ment of certain nonobstructed urinary tract infections and may also help avert possible sequel

■ **Around-the-clock coverage for 14 days**

Mounting evidence in current medical literature suggests a minimum of 14 days' continuous therapy for certain urinary tract infections.* Following the initial 2-Gm adult dosage of Gant each 1-Gm dose provides up to 12 hours of antibacterial activity during the treatment perio When urinary tract infection is more severe, *t.i.d.* (q. 8 h.) dosage schedule may be require Both regimens provide around-the-clock therapy, important because normal urinary reten during sleep tends to favor bacterial proliferation. It is also convenient for patients not to ha to take middle-of-the-night medication.

■ **Also effective in certain nonobstructed chronic and recurrent urinary tract infection**

Nonobstructed urinary tract infections, such as cystitis or pyelonephritis—chronic and/or re rent—develop more commonly in the elderly and debilitated, and response to Gantanol is oft highly satisfactory.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

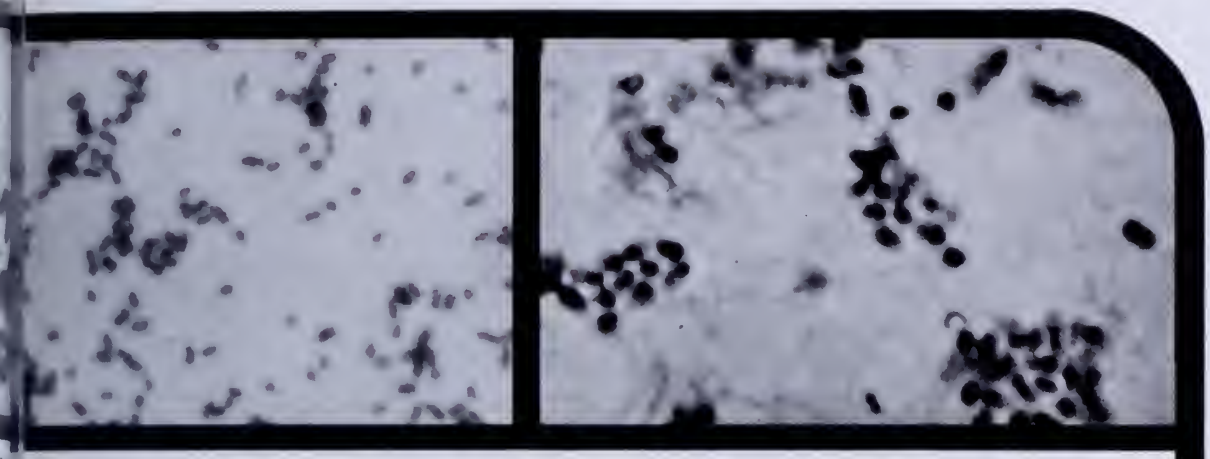
Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not erac or prevent sequelae (rheumatic fever, glomerulonep of such infections. Deaths from hypersensitivity reac agranulocytosis, aplastic anemia and other blood dyscr have been reported and early clinical signs (sore t fever, pallor, purpura or jaundice) may indicate se blood disorders. Frequent CBC and urinalysis with n scopic examination are recommended during sulfona therapy. Insufficient data on children under six with ch renal disease.

Precautions: Use cautiously in patients with imp renal or hepatic function, severe allergy, bronchial asth glucose-6-phosphate dehydrogenase-deficient individu whom dose-related hemolysis may occur. Maintain ade fluid intake to prevent crystalluria and stone form

Adverse Reactions: *Blood dyscrasias* (agranulocy aplastic anemia, thrombocytopenia, leukopenia, hem anemia, purpura, hypoprothrombinemia and methem

linical practice



obacter sp.—Gram stain showing characteristic negative rod

Proteus mirabilis—Flagella stain

our option: tablets or suspension

nol Tablets or the pleasant-tasting, cherry-flavored Suspension can provide dependable cterial activity to control susceptible nonobstructed cystitis and pyelonephritis. Sympto- improvement usually may be expected to begin within 24 to 48 hours. Usual precautions ulfonamide therapy should be observed, including adequate fluid intake. Gantanol is ally well tolerated, with relative freedom from complications; the most common side effects usea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examina- re recommended during therapy.

on file, Hoffmann-La Roche Inc., Nutley, N.J.

nobstructed cystitis due to susceptible organisms

Gantanol® B.I.D.
ulfamethoxazole)
asic therapy

a); *allergic reactions* (erythema multiforme, skin ons, epidermal necrolysis, urticaria, serum sickness, is, exfoliative dermatitis, anaphylactoid reactions, bital edema, conjunctival and scleral injection, pho- itization, arthralgia and allergic myocarditis); *gastro- nal reactions* (nausea, emesis, abdominal pains, tis, diarrhea, anorexia, pancreatitis and stomatitis); *eactions* (headache, peripheral neuritis, mental de- on, convulsions, ataxia, hallucinations, tinnitus, ver- nd insomnia); *miscellaneous reactions* (drug fever, toxic nephrosis with oliguria and anuria, periarteritis a and L. E. phenomenon). Due to certain chemical ities with some goitrogens, diuretics (acetazolamide, es) and oral hypoglycemic agents, sulfonamides aused rare instances of goiter production, diuresis poglycemia as well as thyroid malignancies in rats ng long-term administration. Cross-sensitivity with gents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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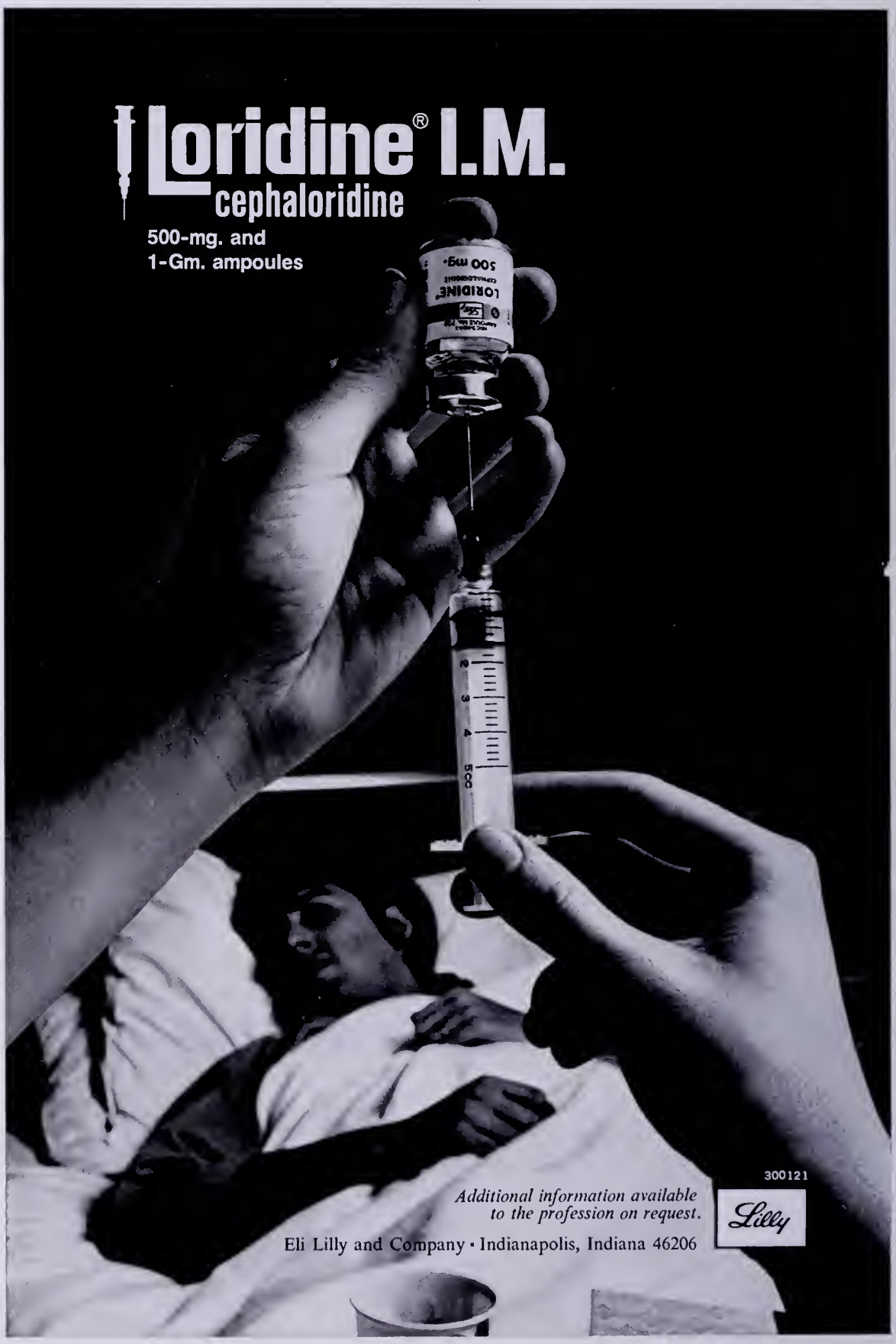
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Maxillofacial Injuries

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With high speed motor vehicle transportation severe facial injuries are becoming more common. According to the Cornell University report on Automotive Crash Injury Research,[1] 72% of persons involved in an automobile accident sustained head and face injuries. Although many of these were classified as minor injuries, a significant number remain a threat to life. Therefore, an awareness of these injuries and their management is imperative for anyone involved in the emergency care of these patients.

The initial management is a key to increased survival of patients with severe maxillofacial injuries. Often the facial injury is the most obvious presenting injury and receives more notice than other more subtle, but dangerous injuries. Therefore it is essential that every injured patient receive a full examination by a physician.

The most essential area of initial examination is the airway. In facial injuries this may be obstructed by blood and clots, by prolapse of the tongue into the pharynx due to loss of mandibular support or by direct trauma to the larynx or trachea. These patients need suctioning, anterior traction on the tongue and occasionally endotracheal intubation or tracheotomy.

Hemorrhage must be controlled by packing, by pressure or by clamping active bleeders until definitive care is undertaken. Vital signs are taken and an intravenous infusion begun. On all head injury patients the level of consciousness should be noted on arrival. Evaluation of the progression of the neurologic status can be aided by changes in the level of consciousness. Persons with a history of unconsciousness or amnesia of the accident should be watched neurologically until stable.

A rapid examination for chest, abdominal and extremity injuries is then carried out as well as a general neurologic exam. On all severe facial fractures cervical spine injury should be ruled out clinically and radiographically before extensive patient movement. Then further indicated radiographic studies are performed.

Following the diagnosis of the extent of the patient's severe injuries, stabilization should be undertaken and a more complete exam performed. Included in the exam should be a search for contact lenses, broken dentures, and wallet cards indicating drug sensitivities or chronic illness such as diabetes. The facial skeleton should be palpated for fractures and the facial nerve checked for function, the eye for vision and the teeth for occlusion.

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Lacerations are closed in the receiving ward or operating room. Some fractures, mainly mandibular or nasal, may be reduced and immobilized under local anesthesia if the patient is completely stable. However, reduction of many facial fractures is deferred until the patient's condition is stabilized. Certain undisplaced fractures and unilateral fracture of the coronoid process of the mandible do not require treatment other than a soft diet.

NASAL FRACTURES

This is the most common fracture of the facial skeleton. Breaks involving the external supporting structures are usually easily recognized but fractures with subluxation of the cartilaginous nasal septum may not be noticed, yet may cause the most debilitation for the patient. Diagnosis of an external nasal fracture is best made by inspection and palpation; that of the nasal septum is indicated by epistaxis and nasal airway obstruction and is detected by discontinuity of the septal contour or by a septal hematoma. Radiographs may confirm bony fractures, but often will not detect cartilaginous injuries.

Treatment of osseous nasal fractures can be accomplished by manipulative reduction, external splinting, and, if necessary, intranasal packing. Many nasal fractures with septal subluxation or cartilaginous fractures require open reduction as severely twisted noses often are the result of unreduced fractures of the cartilaginous nasal pyramid. Septal hematomas should be drained and antibiotics instituted.

FRONTAL SINUS INJURIES

Fractures of the frontal sinus may be detected by palpation of a depression on the forehead, by visualization of a fracture through a laceration or by noting the break on X-rays. Whenever a frontal sinus fracture is detected it is imperative that the posterior wall of the sinus be evaluated for fracture with a possible dural tear. X-rays help, but if there is an overlying laceration, direct visualization of the sinus through the laceration and anterior wall fracture is best.

Injury to the posterior wall should be suspected in every frontal sinus fracture with cerebrospinal fluid. When a posterior wall fracture is found, surgical repair is needed. If the trauma is limited to the anterior wall, the fragments are aligned and position maintained by interosseous wiring or periosteal chromic sutures. In injuries near the nasofrontal duct, where there is likelihood of obstruction of this orifice, a small polyethylene catheter is inserted into the sinus and brought out through the fracture and laceration to vent the sinus and allow drainage until the nasofrontal orifices open.

ZYGOMATIC FRACTURES

Fractures of the zygoma generally fall into two types—either dislocation of the entire bone with fractures at or near the suture lines or fracture of the zygomatic arch. A patient with the former will often present with flattening of the cheek, a "step" defect palpable on the superior surface of the inferior orbital rim, tenderness in the frontozygomatic suture area and over the zygomatic arch, hypesthesia or anesthesia of the infraorbital nerve area and occasionally diplopia. X-rays demonstrate fractures of the inferior orbital rim, anterior and lateral walls of the maxillary sinus, lateral orbital rim and zygomatic arch. Reduction may be accomplished transantrally with a Caldwell-Luc type approach and packing of the maxillary sinus to maintain position. More severe fractures will require open reduction and interosseous wiring of the inferior orbital rim and lateral orbital rim fracture sites.

Zygomatic arch fractures, usually sustained by a lateral blow directly over the arch, may present with trismus due to impaction of the fracture fragments against the coronoid process of the mandible. Such an injury is diagnosed by palpation of the depressed arch and radiographs, the best view being a submentovertex projection. Reduction is accomplished by the Gillies approach beneath the temporalis muscle fascia from a hairline temporal incision, by the Keen approach intra-orally, or percutaneously by lifting the fracture fragments out with a hook

or towel clip. Stabilization is usually unnecessary; when it is, it may be accomplished by placement of packing beneath the arch for a week, or by direct interosseous wiring.

MAXILLARY FRACTURES

The most frequent lines of fracture are those described by Rene LeFort.[2] These are primarily midface fractures (Fig. 1). The lower most is a fracture above the palate involving the maxillary sinuses and nasal septum, the LeFort Type I, and is diagnosed by a freely movable upper dento-alveolar arch with a stable upper face.

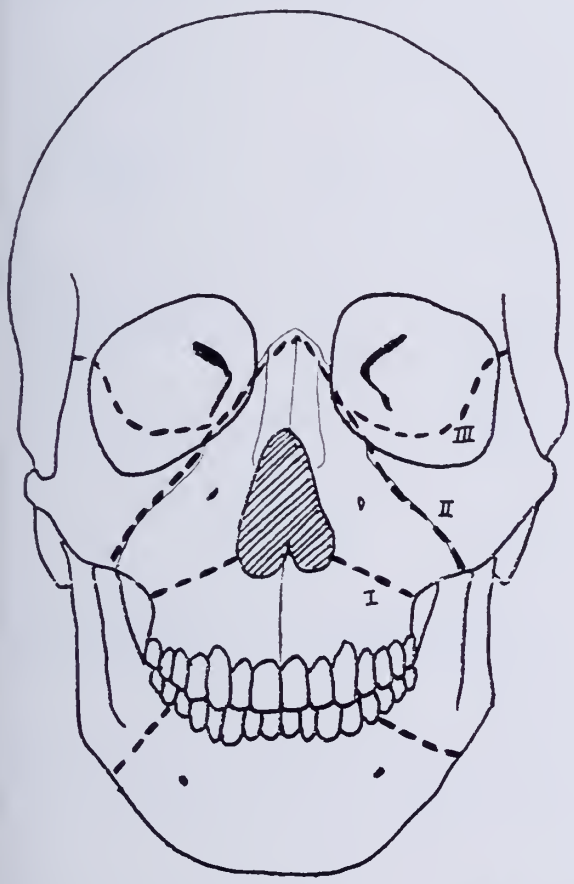

Fig. 1. Lines of fractures of the mid-face according to LeFort. Bilaterial fractures of the body of the mandible.

The LeFort Type II fracture is a pyramidal fracture of the maxillae with the apex at the root of the nose. Examination reveals movement of the entire midface with palpation of the palate and upper dento-alveolar arch. Often there is posterior displacement of the midface segment with a resultant open bite—the molar teeth come into occlusion before the incisors leaving a gap anteriorly.

Complete separation of the facial bones from the skull is the Type III in the LeFort classification and involves bilateral fractures of the zygomatic maxillary complex with a nasal fracture through the root of the nose. This results in a sagging, "dishfaced" deformity and is often accompanied with cerebrospinal fluid rhinorrhea.

All of these fractures are treated by reduction of the facial bones into proper position using the cranium and mandible as reference points, interosseous wiring at fracture sites, and by immobilizing the fractures with suspension wires from the frontal bone or stable zygomatic arches to an upper arch bar.[3] The upper arch bar is secured to a lower arch bar on the mandibular teeth to gain the inferior reference point of reduction.

A unique type of fracture is the "blowout fracture" of the orbit. Here an object, often a fist, drives the contents of the orbit posteriorly, compressing them and finally rupturing the orbital wall in its weakest point which is usually the floor. The orbital contents then herniate into the maxillary sinus. The patient presents with a black eye and may show infraorbital anesthesia, diplopia due to settling of the globe or limitation of upward gaze by entrapment of the inferior rectus muscle by bone spicules from the fracture. X-rays will show either a tear drop opacification in the roof of the maxillary sinus or clouding of the entire sinus. If the patient shows signs of inferior rectus trapping, diplopia or enophthalmus, then surgical repair of the orbital floor should be done.

MANDIBULAR FRACTURES

Mandibular fractures are next in frequency to nasal fractures in facial trauma. The patient has loss of the usual occlusion of his teeth, local tenderness of the fracture area and often some degree of trismus. Palpation of the inferior mandibular border, of the condylar region and of the teeth indicate the

fracture sites which are confirmed radiologically. One should always look for more than one fracture in mandibular injuries as these usually occur in pairs. Treatment is by upper and lower arch bar application with intermaxillary fixation. Often this needs supplementation with direct interosseous wiring of the fracture fragments.

It must be remembered that in mandibular fractures the support of the tongue may be lost, allowing it to prolapse into the hypopharynx and cause respiratory obstruction. Therefore these patients should not lie supine; they are safer sitting with their head forward or lying prone or on their side.

TEMPORAL BONE FRACTURES

Facial and head trauma may result in fractures through the temporal bone resulting in facial nerve paralysis, hearing loss, vertigo and/or cerebrospinal fluid otorrhea. One should look for facial nerve function, blood behind the ear drum, a recent tympanic membrane perforation, cerebrospinal fluid otorrhea or a post auricular ecchymosis in all head injury patients. These indicate a temporal bone fracture, or basilar skull fracture. Surgical exploration may be necessary in certain of these patients.

LARYNGEAL FRACTURES

Blunt trauma to the neck with resultant hemoptysis, hoarseness, tenderness over the thyroid cartilage or pain with swallowing should arouse suspicions of a laryngeal injury. Subcutaneous emphysema and dyspnea with laryngeal stridor in this patient would be almost diagnostic. Mirror evaluation of the larynx with the observation of ecchymosis or tears is the fastest way to diagnose this injury. Respiratory obstruction is often rapid; these patients need careful watching and tracheostomy if there is any doubt as to respiratory status. Early surgical repair is indicated in a laryngeal fracture.

SOFT TISSUE INJURIES

Lacerations should be evaluated with regard to underlying structures. Palpation of the bony framework will often reveal whether the bone is intact or fractured. Vertical lacerations on the lateral face behind a line from the outer canthus of the eye to the commissure of the lips should be evaluated for facial nerve injury. Lacerations in the parotid duct area must be evaluated for ductal damage (Fig. 2). Careful closure of the subcutaneous tissues and placement of dermal sutures allow skin sutures of fine silk or nylon to be placed without tension, resulting in diminished scarring.

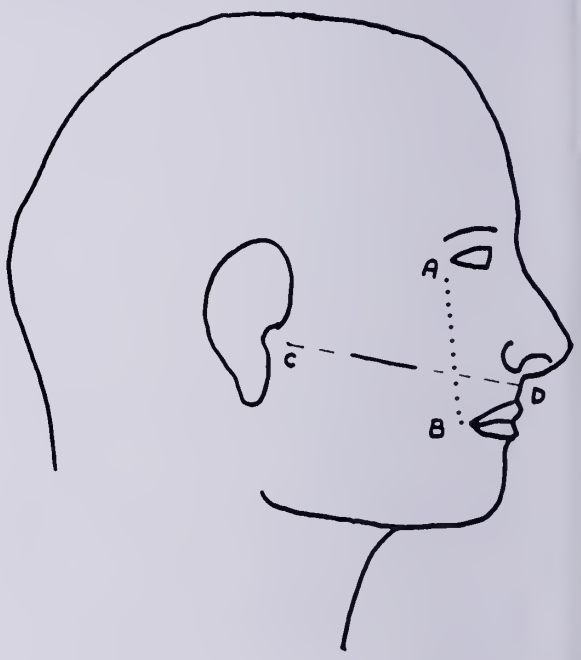

Fig. 2. A-B: Line from the outer canthus of the eye to the commissure of the lips, behind which lacerations of the facial nerve are feasible for repair.

C-D: Line from the tragus of the ear to the midportion of the philtrum; the parotid duct lies just below the middle third of this line.

SUMMARY

Facial and head injuries are the most frequent injury sustained in automobile accidents, but the physician must be alert to the possibility of other injuries in maxillofacial trauma patients. Steps to evaluate and stabilize the patient must be completed before surgical repair of facial fractures and injuries.

REFERENCES

1. Cornell University Automotive Crash Injury Research: The injury-producing accident: a primer of facts and figures. New York, (Aug.) 1961.

2. Le Fort, R.: Étude expérimentale sur les fractures de la mâchoire supérieure. Rev. de chir., Paris, 23: 208, 360, 479, 1901.

3. Dingman, R. and Natvig, P.: Surgery of Facial Fractures, W. B. Saunders, Philadelphia, 1964.

EXAMINATION OF THE PATIENT WITH FACIAL INJURIES	
AIRWAY	Blood or clots in pharynx Prolapse of tongue Injury to larynx or trachea
HEMORRHAGE	Pack or clamp for initial control Pack or tie definitively when diagnosis of injuries completed
INITIAL EXAMINATION	Neck for cervical spine injury Chest for blunt or penetrating trauma Abdomen for gastrointestinal or urological injury Extremeties for fractures, lacerations, vascular injury Neurological to include extremety movement and level of consciousness
RADIOGRAPHIC	Cervical spine views Facial views, usually Caldwell, Waters, lateral and submento-vertex projections skull and other indicated studies
COMPLETE FACIAL EXAMINATION	Facial Nerve Function complete, partial or absent Ophthalmologic vision in each eye diplopia full range of extraocular movement pupil equality and reaction to light Otologic tympanic membrane perforation hemotympanum post auricular ecchymosis (Battle's Sign) cerebrospinal fluid otorrhea Palpation orbital rims for irregularity or "step" defect nose for crepitance and mobility zygomatic arches and mandibular condyles for tenderness or depression anterior and lateral maxillary walls (best done intraorally) inferior border of the mandible Intranasal fresh septal irregularity septal hematoma cerebrospinal fluid rhinorrhea Intraoral trismus mobility of upper dentoalveolar arch occlusion of teeth Neurologic cranial nerve exam, especially for anesthesia over infraorbital or mental nerve areas Parotid duct injury if laceration in region of the duct

The Dizzy Patient

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Patients with vertigo present an interesting and difficult diagnostic problem. A well organized approach is necessary to arrive at an accurate diagnosis and to institute suitable treatment. The study must include: history and physical, auditory testing, vestibular testing, radiologic examination and metabolic studies.

History and Physical

The history must be very thorough and may be divided into general areas: vertigo symptoms-whether room or patient is spinning, length of attacks of vertigo, suddeness of onset, frequency of attacks, severity and duration of attacks, subjective sensation, experience of vomiting or headaches, changes in dizziness with head movement; ear symptoms-hearing loss, tinnitus, fullness of ear, drainage, etc.; neurologic complaints, as-diplopia, clumsiness, unconsciousness, numbness of extremeties, difficulty swallowing or talking and allergic symptoms-exposure to irritating fumes, paints, use of tobacco in any form, regular medications. The history is vital in helping to determine the actual cause of the vertigo.

The physical examination should include the evaluation of ears, nose and throat, neurological evaluation of the cranial nerves, cerebellar signs and fundoscopic examination. It is important to check the blood pressure in both supine and standing positions. For example, a patient who is vertigenous on arising from bed in the morning, and has no problem the remaining day, may well have postural hypotension.

Audiologic Evaluation

We are now able to determine site of lesion for many different ear pathologies. The following are tests performed for evaluation of the dizzy patient.

1) Pure tone-air and bone conduction. A low tone hearing loss is indicative of Meniere's Disease while a unilateral high tone loss will be present in 70 per cent of patients with an acoustic neuroma.

2) Speech Hearing Tests (Discrimination Score). Some impairment of the patient to understand words is present in inner ear lesion such as presbycusis and Meniere's Disorder. However, in VIIIth nerve lesion, discrimination of words is grossly impaired. With syphilis involving the VIIIth nerve, discrimination is almost nil.

3) Special tests

a) Bekesy audiometry and modified tone decay tests. (Example VIIIth nerve tumor will show easy fatiguability.)

b) SISI (Short Increment Sensitivity Index) also helps to distinguish between VIIIth nerve and cochlear lesions.

c) Acoustic reflex (Impedance Audiometry). Acoustic reflex is present in most normal individuals at a level of 70-90 dB above threshold for a given frequency. Patients with cochlear pathology show acoustic reflex at reduced sensation levels which is indicative of recruitment or abnormal sensitivity to loud sounds. This is a phenomenon of cochlear disease. For some individuals with VIIIth nerve tumor, reflex is present but rapidly decays with prolongation of tone. Other patients with VIIIth nerve tumor will show no acoustic reflex.

Vestibular Evaluation

I routinely use electro-nystagmography for vestibular testing. By use of a gaze bar, optokinetic drum, positional changes and

bi-thermal caloric testing, nystagmus behind closed eyes can be recorded, measured and evaluated. Electrodes are applied above and below and near the outer canthus of each eye. These electrodes record vertical and horizontal eye movements. From the test results it is possible to definitely determine whether vertigo is either peripheral or central in origin or, if nystagmus is of such a nature, that we need further testing to localize the problem.

Radiographic Evaluation

This examination is primarily performed to detect abnormalities of the internal auditory canal, and includes petrous pyramid x-rays. If erosion should be found, posterior fossa myelography with Pantopaque is done. Polytome x-rays of the internal canal are most indicative of erosion and when combined with pantopaque are most conclusive. The latter also outlines the size of an acoustic neuroma and the surgical approach. A trans-labyrinthine approach is made on small tumors (1.5-2 cm). With normal hearing (pea size tumor) a middle fossa approach is best. Combined trans-labyrinthine and sub-occipital operations are indicated when the tumor is large (more than 2 cm).

Metabolic Evaluation

It is thought that close to 50 per cent of Meniere's Disorders will have errors in metabolism. These include:

1) Hypothyroidism. Patients with decreased resistance to respiratory infections, poor response to allergic management and vertigo may be suspected of having hypothyroidism. Laboratory tests help to establish this diagnosis.

2) Hypoglycemia. Symptoms of vertigo, light headedness with tremor and syncope may occur 2-3 hours after meals. A five hour glucose tolerance test is indicated to diagnose the condition accurately.

3) Hypoadrenocorticism. Symptoms of Meniere's Disease become manifest during periods of stress and the adrenal pituitary axis plays a vital role in man's ability to compensate for stress. However, 90 per cent of the adrenal cortex must be destroyed before diagnostic clinical findings occur in the resting state. Therefore, this diagnosis is difficult.

4) Lipoprotein Dysfunction. This is thought to sludge the small microscopic blood vessels of the cochlea and cause poor oxygenation.

Other metabolic causes for vertigo are 1) increased hemoglobin hematocrit as in polycythemia and decrease in anemias, 2) congenital and acquired syphilis, 3) food allergy. The latter is becoming progressively important and food allergies have been shown to produce Meniere's like symptoms such as vertigo, tinnitus, fullness in the ear and/or decreased hearing. Suspect allergy when there is a bilateral hearing loss, unsteady feeling, "floating female", and episodic vertigo.

Treatment

This varies with the cause. It is easier to think of the acute phase of the vertigo, regardless of etiology, versus the chronic one. There are a few drugs that will suppress the symptoms in the acute phase. The following regimen is used:

1) Atropine 1/150 gr IM parasympathetic drug

2) Valium in tolerating dose has been shown in animal experimentation to suppress the neurons of the semi-circular canals and utricle, saccule. Clinically, one uses 25 mg in 500 cc over 10 hours intra-venous. (Excellent in the acute stage). Dramamine will suppress only utricular vertigo, and therefore, is efficacious in motion, and only, motion sickness. Antiemetics such as Tigan in suppository forms are used to control vomiting.

3) Innovar: I have used this in the acute and chronic vertigenous patient with good result. However, it is only efficacious in the inner ear problem and of absolutely no benefit in vertigos of retro-cochlear or central origin. It should be given by trained personnel in a hospital.

In the chronic conditions, listed below, treatment varies with diagnosis. The following is a very brief discussion of possible causes of vertigo and their treatment.

1) Meniere's Disease, Cochlear hydrops, vestibular hydrops. A vasodilatory regime of Histamine IV and various forms of nicotinic acid in flushing doses or Arlidin is indicated. If hospitalized, 95 per cent 0_2 and 5 per cent CO_2 30 minutes twice a day will help. This is based on the supposition that vasospasm plays a major role in the development of symptoms. It is effective in two-thirds of cases.

2) Postural or positional vergito, benign. Treatment is the same as for Meniere's Disease.

3) Cervical vertigo that occurs in cases of neck disorders and whiplash, respond best to Valium, since it tends to relax the spasm of muscles and suppress the vertigo.

4) Central vascular vertigenous problems, most notably basilar artery insufficiency, should have anti-coagulants.

5) Vertigenous epilepsy (diagnosed by history because of premonition that vertigo will occur) is treated with dilantin.

6) Certain drugs will instigate vertigo
   a) Alcohol will cause direction changing nystagmus
   b) Dilantin causes gaze nystagmus
   c) Barbiturates cause gaze and positional nystagmus
   d) Marijuana and hallucinatory drugs
   e) In some instances, birth control pills will cause vertigo and hearing loss. It takes 60-90 days for symptoms to subside after pill is stopped.

7) Chronic Otitis Media (cholesteatoma) with a fistula of the internal auditory canal. Surgery is indicated.

8) When vertigo is a symptom of temporal bone fracture, the symptom may persist for two years, or forever. A vestibular nerve section can be accomplished through a middle fossa approach.

Surgical Treatment of Meniere's Disease

The successful surgery for this condition is one that not only relieves the vertigo, but improves the hearing. Most procedures (sacculotomy, subarachnoid endolymphatic shunt, ultra-sound, cryosurgery, denervation of the labyrinth claim about the same result with relief of vertigo. Because many of these procedures are destructive to the labyrinth, the hearing is worse in many cases. I prefer to do the endolymphatic shunt for this reason. A labyrinthectomy is indicated when the hearing is very poor (70 dB or worse.)

The subarachnoid endolymphatic shunt is accomplished through a post-auricular incision. A simple mastoidectomy is done. The posterior semi-circular canal is identified and the endolymphatic sac is directly posterior and mid-right angle to the canal. The dura of the posterior fossa is exposed with the endolymphatic sac. An incision is made longitudinally in the sac and a tube extended toward the cerebellum in the subarachnoid space. The tube drains the endolymphatic duct.

Summary

1) Every patient with an inner ear problem, whether it is mild postural vertigo or typical Meniere's Disease, should be suspected of having a tumor of the VIIIth nerve or cerebello-pontine angle until proven otherwise.

2) It is possible by virtue of thorough examinations to localize the lesion that causes vertigo. Treatment is then facilated.

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Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. Use a narcotic antagonist in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. *Liquid,* 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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G. D. Searle & Co., Medical Department
Box 5110, Chicago, Illinois 60680

Placidyl®
(ETHCHLORVYNOL)

Brief Summary

Indications—Placidyl (ethchlorvynol) is indicated as short-term hypnotic therapy in the management of insomnia.

Contraindications—Drug hypersensitivity and porphyria.

Warnings—Not recommended during the first and second trimester of pregnancy. Caution patients of possible combined exaggerated effects with alcohol, barbiturates, tranquilizers or other CNS depressants. Exaggerated effects might result in blurring of vision, paralysis of accommodation and profound hypnosis. Caution patients concerning driving a motor vehicle, operating machinery, or other hazardous operations requiring alertness after taking the drug. ADMINISTER WITH CAUTION TO PATIENTS WITH SUICIDAL TENDENCIES AND DO NOT PRESCRIBE LARGE QUANTITIES OF THE DRUG. Adjustment of the dosage of oral anticoagulants might be necessary when beginning ethchlorvynol therapy, during therapy, or after stopping therapy. This drug is not recommended for use in children. PLACIDYL HAS THE POTENTIAL FOR THE DEVELOPMENT OF PSYCHOLOGICAL AND PHYSICAL DEPENDENCE. INSTANCES OF SEVERE WITHDRAWAL SYMPTOMS, INCLUDING CONVULSIONS AND DELIRIUM CLINICALLY SIMILAR TO THOSE SEEN WITH BARBITURATES, HAVE BEEN REPORTED IN PATIENTS TAKING REGULAR DOSES AS LOW AS 1000 MG. PER DAY OVER A PERIOD OF TIME WHEN THE DRUG WAS SUDDENLY DISCONTINUED. PROLONGED ADMINISTRATION OF THE DRUG IS NOT RECOMMENDED. Addiction-prone patients or those who are likely to increase dosages of the drug on their own initiative should be observed for evidence of signs or symptoms which may indicate possible early withdrawal or abstinence symptoms. Signs and symptoms associated with withdrawal and abstinence include unusual anxiety, tremor, ataxia, slurring of speech, memory loss, perceptual distortions, irritability, agitation and delirium. Other less well defined signs and symptoms, not necessarily due to withdrawal and abstinence, may include anorexia, nausea or vomiting, weakness, dizziness, sweating, muscle twitching and weight loss. Abrupt discontinuance of Placidyl following prolonged overdosage may result in convulsions and delirium.

Precautions—Toxic amblyopia has been reported with long-term continuous use of ethchlorvynol. Permanent visual defects have been observed, although amblyopia has improved after discontinuation of the drug. Drug dosage should be limited for elderly and debilitated patients to the smallest effective amount. If pain is present, this drug should only be given if insomnia persists after pain is controlled with analgesics. Caution is advised in prescribing the drug for patients who are being treated with either MAO inhibitors or antidepressants. Transient delirium has been reported with the combination of Placidyl and amitryptyline. Drug dosage should be reduced if prescribed for patients receiving MAO inhibitors or antidepressants. Caution should be exercised in patients with impaired hepatic or renal function. Patients who respond unpredictably to barbiturates or alcohol, or who exhibit excitement and release of inhibition in association with such agents, may also react in this way to Placidyl. Rarely, patients may exhibit symptoms suggestive of en unusual susceptibility to the drug; such es prolonged hypnosis, profound muscular weakness, excitement, hysteria, or syncope without marked hypotension. Transient giddiness or ataxia may occur.

Adverse Reactions—Hypotension, nausea or vomiting, gastric upset, aftertaste, blurring of vision, dizziness, facial numbness, and allergic reaction typified by urticaria have been reported following Placidyl administration. Mild "hangover" and symptoms of mild excitation have occurred in some patients. There have been rare reports of cholestetic jeundice occurring in petients taking ethchlorvynol. A few cases of thrombocytopenia have been reported in petients receiving ethchlorvynol. 305432

Give us her nights.

Prescribe Placidyl. Chances are, we'll give her a good night's sleep.

Insomnia is often suffered by the elderly. Anxiety and agitation might be the cause. Or the effect. In time that can be determined. But tonight one fact is painfully clear: she needs sleep.

When sleep is synonymous with therapy, remember . . . Placidyl is synonymous with sleep. It has been for over 17 years.

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Placidyl® CIV

(ETHCHLORVYNOL CAPSULES, 500 or 750 mg.)

Medicare and Medicaid 1973

EDITOR'S NOTE: *The AMA's Council on Medical Service presented two reports of significant interest which were adopted at the 1973 Annual Convention. It is important that they receive wide dissemination within the profession.*

The report on Medicare was included in the October issue. The Medicaid report appears below.

MEDICAID

Over fifty sections of PL 92-603 affect Medicaid, the Federal-State grant-in-aid program of Medical Assistance to the needy. The Council's Committee on Government Medical Services met with representatives of DHEW's Medical Services Administration, which administers Medicaid at the Federal level, and reviewed the potential impact of these changes early this year. The Committee indentified a number of significant changes in eligibility, benefits, administration, and long-term care; one of the most significant trends, however, is an increasing correlation between Medicare and Medicaid.

Some correlation between the two programs existed, by regulation, prior to the enactment of PL 92-603. For example, states were not permitted to pay physicians more under Medicaid than the "reasonable charge" under Medicare, although a lower rate of payment was permissible, and "skilled nursing homes" under Medicaid were expected to meet the same standards as "extended care facilities" under Medicare.

Now these and a number of other provisions are a matter of law, rather than regulation. For example, the formula for limitations on prevailing charges in Medicare discussed earlier also applies to Medicaid and, as mentioned earlier, the term "skilled nursing facility" has been substituted for both "extended care facility" in Medicare and "skilled nursing home" in Medicaid, and the same level of care definition applies in both programs. PSROs will review both Medicare and Medicaid cases, applying the same standards to both. Similarly, throughout PL 92-603 there are many new provisions which will apply to both programs. It may be presumed that, in many instances, the Medicare agency, with its greater experience in direct supervision of health care financing, will tend to be the lead agency in regulations and guidelines applying to both programs.

Following are some of the more significant changes in Medicaid, as identified by the Committee:

Eligibility: PL 92-603 establishes a new income maintenance program, which will replace the present adult Public Assistance categories (Old Age Assistance, Aid to the Blind, Aid to the Permanently and Totally Disabled) as of January 1974. The program will be Federally financed and administered through a new Bureau of Supplemental Security Income in the Social Security Administration, and will provide each eligible individual with a minimum income of $1,560 per year or each couple, both of whose members are eligible, with a minimum income of $2,340 per year.

This has a potential for increase in the Medicaid load in some states, since the uniform Federal standards for income and for definition of blindness and permanent and total disability will not only be more liberal than those in some states, but also some individuals who would not apply for Public Assistance will be less reluctant to accept the Federal subsidy. States will have the option of including all this group in their Medicaid programs, or of limiting the program to those eligible by January 1972 state standards; however, if they choose the latter, they must include the medically indigent who have reduced their income to the January 1972 limits through medical expenditures.

(Continued on Page 334)

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual searring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual searring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

'he lesions on his face
re solar/actinic–
)-called "senile" keratoses...
nd they may be premalignant.

lar, actinic or senile keratoses

se lesions may be called by several names, but they lly can be identified by the following characteris- The typical lesion is flat or slightly elevated, of a vnish or reddish color, papular, dry, rough, adherent sharply defined. They commonly occur as multiple ns, chiefly on the exposed portions of the skin.

quence of therapy– ectivity of response

r several days of therapy with Efudex® (fluorouracil), hema may begin to appear in the area of the lesions; reaction usually reaches its height of unsightliness discomfort within two weeks, declining after dis- inuation of therapy. This reaction occurs in affected s. Since the response is so predictable, lesions that ot respond should be biopsied.

ceptable results

tment with Efudex provides highly favorable cos- e results. Incidence of searring is low. This is par- larly important with multiple facial lesions. Efudex ld be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, searring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

ROCHE

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Nutley, N.J. 07110

'his patient's lesions were resolved with

Efudex®
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5% cream/solution...a Roche exclusive

(Continued from Page 331)

States are also prohibited from using the 1972 increase in Social Security benefits as a basis for dropping aged individuals from the current assistance rolls. On the other hand, inclusion of the disabled under Medicare if they are eligible for Social Security benefits will transfer some expenditures from Medicaid to Medicare.

Benefits: There has been little liberalization of benefits. Family planning is now mandatory in Medicaid programs and states which do not implement the screening-diagnosis-treatment program for children will be penalized by reduced Federal matching after mid-1974. Psychiatric care for those under 21 is also included, at state option.

Some of the changes, in fact, may tend to restrict Medicaid benefits. A requirement in the Federal law since its enactment in 1965, which called for broadening the scope of Medicaid benefits to achieve "comprehensive" care by 1975 (later changed to 1977) has been deleted, as has been a prohibition on reduction of Medicaid expenditures from one year to the next. In addition, cost-sharing provisions have been added: for the needy, a "nominal" copayment is permitted for those services not mandated by Federal law, and for the medically needy, the state is not only permitted to require the "nominal" copayment, but it is also required to charge an income-related premium for Medicaid coverage.

Administrative Changes: As noted, PSROs will assume review responsibility for Medicaid. Until such time as the PSRO takes over, Medicaid is to use the same utilization review committees as Medicare unless Medicaid can demonstrate its review is more effective; matching for institutional stays will be reduced one-third after they exceed specified periods unless the institution can demonstrate effective utilization controls.

DHEW also now has authority to terminate payment to specific providers and physicians found to be "abusing" the program, and Federal penalties for fradulent claims are spelled out; previously, this was a state responsibility. Under one peculiar correlation between Medicare and Medicaid, Medicaid can be used to reinforce Medicare controls; if Medicare has difficulty recovering "overpayments" from providers, no Medicaid payments will be made to those providers.

Medicaid now also includes funding authority for data processing systems to handle Medicaid claims, up to 90 per cent of the cost of establishing such systems and up to 75 per cent of the cost of operating. Federal directives to date clearly indicate that these funds may be used not only to finance systems owned and operated by state governments, but also for systems for which the state contracts with non-governmental agencies. However, no funds have yet been specifically appropriated for this section of the law.

Long-Term Care: As noted, the term "skilled nursing facility" will replace "skilled nursing home" and a common definition of levels of care (discussed in the Medicare section of this report dealing with "Skilled Nursing Facilities"). States will be responsible for surveys of long-term care facilities, with Federal funding for the training of state inspectors.

In this connection, the Council took note of Resolution 4 (C-72), which emphasized an Association position that physicians should themselves determine the frequency with which they see patients, and which objected to the carry-over to Medicaid of the Medicare requirement that patients in extended care facilities be seen by physicians at least once each thirty days. The objection was based on the fact that Medicare's extended care facility provided one high level of care, while Medicaid's skilled nursing homes' patient load included not only post-hospital convalescents requiring frequent medical attention, but also the long-term chronically ill for whom less frequent attention was needed. Use of the same standard for professional attendance for two different types of facility could clearly result in excessive physicians' visits.

(Continued on Page 336)

Integument!

ur skin—the human integument covers us, defines us, protects s. But skin is subject to cuts, urns, abrasions. And infections. eosporin Ointment fights fection by providing broad ntibacterial action against sus- eptible skin invaders. It contains ntibiotics that are rarely used stemically, reducing the risk sensitization.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Complete literature available on request from Professional Services Dept. PML.

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Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q.s. In tubes of 1 oz. and ½ oz. and 1/32 oz. (approx.) foil packets.

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(Continued from Page 334)

The Council and its Committee discussed this problem with Federal officials involved in both programs and it is their presumption that, with the new legislation, the type of care provided in "skilled nursing facilities" will be of a fairly intensive level under both programs and that the requirement for physician visits at least monthly is not, therefore, unreasonable.

They believe that the less intensive type of long-term care, which might not require monthly physician visits, will be given in intermediate care facilities (either free-standing or a distinct section of a facility which also provides "skilled nursing services") where the monthly visit standard will not apply. However, in response to the meeting with Council representatives, Medicare officials are exploring the possibility of applying the monthly visit standard only during the early months of institutionalization, and making the frequency of visits after that point less rigid, subject to utilization review decisions.

CONCLUSION

The Council on Medical Service presents this report as an informational document, for this House of Delegates and the medical profession in general, on changing trends in Medicare and Medicaid resulting both from experience and from amendments included in PL 92-603, and in specific response to Resolutions 4, 10, 43, and 48 of the 1972 Clinical Convention.

The Council, however, wishes to emphasize again, and strongly, that this is far from a complete resume of the hundreds of changes made by PL 92-603, and can be considered only a preliminary assessment of these changes since, in almost all cases, the regulatory language has not yet been published—let alone finalized.

The Council will continue to expend its best efforts to present the views of the profession to Medicare and Medicaid officials and will continue working for implementation of these programs which will have the least deleterious effect on patient care and the practice of medicine, and will continue to report to this House as appropriate.

Lean Diets May Reverse The Effects of Atherosclerosis

Findings during the testing of a new drug, have revealed that low-fat, low cholesterol diets can reverse the effects of advanced atherosclerosis disease. This disease causes a loss of functioning power of the arteries because of cholesterol deposits.

University of Chicago researchers conducted the study in which 17 Rhesus monkeys received diets which included butter fat, coconut oil and cholesterol for a year and half.

The experiments were performed to find out the effects of high levels of fat and cholesterol on the aortic surface, and to determine if the oral agent designated W-1372, reduced the severity of the disease.

At the end of the 18 months, the monkeys were divided into groups. Five were examined to assess the severity of the disease. Two groups of five each were then switched to low-fat, low-cholesterol diets for another 18 months. The remaining monkeys were continued on the original diet. One of the groups also received the drug being tested along with their lean diet.

At the end of the second 18 months, the two groups of monkeys on the lean diet experienced a drastic reduction in their cholesterol levels. The five monkeys who received the oral drug showed no more of a decrease than the five that did not receive the agent. The remaining monkeys on the original diet had lesions covering over 95 per cent of the aortic surface area.

The researchers noted that these findings are preliminary because the evaluation does not include the monkeys coronary arteries.

The National Society for Medical Research continues to support this kind of animal research. Only through investigation will science be able to safely produce results which will benefit not only this generation, but generations yet unborn.

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Maybe the patient's self-diagnosis is right. He could have hay fever. But that bright red nasal mucosa, along with the thick discharge and excoriation around the nares, strongly suggests that the main problem is a cold. Hay fever or another form of allergic rhinitis may or may not be an underlying factor.

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INDICATIONS Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illness such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS *Use in children.* In infants and children, particularly antihistamine overdosage may produce convulsions and death.

PRECAUTIONS Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation and epigastric distress.

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Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming)

Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

(III) Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

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around the state

Vital Statistics

NEW MEMBERS

Elmore County

Hughes, Andrew John, b 26, mc Alabama 63, sb 64, 904 Gilmer Avenue, Tallassee, Alabama 36078. GP.

Lauderdale County

Owings, Jon Michael, b 37, mc Tennessee 67, recip. Tennessee 73, 2111 Cloyd Blvd., Florence, Alabama 35630. GP.

Wilcoxson, Glen Paul, b 44, mc Alabama 70, recip. NBME 73, P. O. Box 1079, Florence, Alabama 35630. Anes.

Yoder, Robert Lee, Jr., b 39, mc Alabama 65, sb 66, Florence Clinic, Florence, Alabama 35630. S.

Lee County

Chase, Thomas Metcalf, b 40, mc Alabama 66, recip. NBME 68, 1206 Ferndale Drive, Auburn, Alabama 36830. ObG.

Jarvis, Garth Louray, b 15, mc Michigan 43, recip. Michigan 73, Drake Student Health Center, Auburn, Alabama 36830. ObG.

Mayfield, James Robert, b 30, mc Tennessee 54, recip. Tennessee 72, 1223 Brookwood Circle, Opelika, Alabama 35801. Anes.

Macon County

Upshaw, Marge LaVerne Harper, b 45, mc Meharry 70, recip. Georgia 73, P. O. Drawer F., Tuskegee Institute, Alabama 36088. Anes.

MEMBERS DECEASED

Geneva County

Brunson, Emmett Treadwell, Samson, Alabama, Deceased 9/20/73

Jefferson County

Hillhouse, John Louden, Birmingham, Alabama, Deceased

CHANGES OF ADDRESS

Colbert County

Bowen, Robert Klien, Jr., present Sheffield to 505 N. Columbia Avenue, Sheffield 35660.

Houston County

Cook, Roddy Dean, present Dothan to 2019 Alexander Drive, Dothan, Alabama 36301.

Jefferson County

Arias, Manuel, Pelham, to Shelby Memorial Hospital, Alabaster, Alabama 35007.

Freeman, William James, Birmingham, Alabama, to Apt. 1-Savannah Square, Sumter, South Carolina 29150.

Graves, David Barnett, Birmingham, Alabama to 2815 Seacrest Blvd., Boynton Beach, Florida 33435.

Hayes, William Glenn, Birmingham, Alabama to 200 Medical Arts Building, Charleston, West Virginia 25304.

Hodo, John Baldwin, present Birmingham to P. O. Box 3387-A., Birmingham, Alabama 35202.

(Continued on Page 346)

CONTINUING MEDICAL EDUCATION

"Education Department Holds Second Conference In Obstetrical Care Series"

by Larry Dixon

Utilizing funds supplied by the American College of Obstetricians and Gynecologists, the Medical Association of the State of Alabama's Education Department has just concluded the second conference in its obstetrical care series. These conferences are produced in an effort to aid physicians in this state who are engaged in providing obstetrical care as well as to support the American College of Obstetricians and Gynecologists in their attempts to "produce a better product of pregnancy."

The conference was conducted at Point Aquarius on Lake Logan-Martin, a newly finished resort area boasting golf, tennis, boating, as recreational enticements.

The physicians in attendance were mostly from a twelve county area stretching from Calhoun to Lee Counties. Every physician in that target area received information concerning the conference in addition to a personal invitation to attend. In compliance with ACOG requirements, the obstetrical nurses in the area were also invited.

Dr. J. Benjamin Younger, Associate Professor, Department of Ob-Gyn, University of Alabama School of Medicine, was asked to develop the scientific program and to recruit the faculty. He responded by producing a two day program covering the subject from a review of the Physiology of Pregnancy to a discussion of Estrogen Assays in the high risk pregnancy.

Joining Dr. Younger on the faculty were four other physicians from the University's Ob-Gyn Department—Charles E. Flowers, Jr., M.D., Chairman; John F. Huddleston, M.D., Assistant Professor; Robert V. Barnett, M.D., who holds a clinical professorship in addition to his private practice, and Dr. Phillip Newton who presented a special discussion of "Sonography in Obstetrics."

The Point Aquarius Obstetrical Care Conference was produced by the Education Department as an attempt to provide continuing medical education for physicians in rural areas. Most rural physicians are unable to get away from their practice long enough to attend distant conferences. The conference was planned to be as convenient as possible to the target physicians. By starting the sessions shortly after noon, time was allowed for the doctors attending to make hospital rounds and to maintain morning office hours.

Those physicians in attendance received eleven American Academy of Family Physician prescribed credit hours, and an equal amount of Category One credit for the AMA's Physicians Recognition Award. Those education credits were arranged through the Division of Continuing Medical Education, University School of Medicine and representatives of the AAFP in the initial conference planning.

A third and final conference in this series is tentatively planned for Gulf Shores in the early spring. It is anticipated that this conference will be much larger and will be directed toward physicians in a four state area. Those states being northern Florida, Georgia, Mississippi, and Alabama. The ACOG has already assured the MASA Education Department that funds will be available for a conference of the same quality as the two already produced by MASA.

OBSTETRICAL CARE CONFERENCE participants gathered from a ten county area (numbers 1 and 7); Dr. James H. French, Section Chairman, American College of Ob-Gyn (2); Dr. Charles Flowers, Chairman, Ob-Gyn Department, UAB School of Medicine (3); Dr. Phillip Walton, Professor, Ob-Gyn Department, UAB School of Medicine (4); Dr. J. Benjamin Younger, Associate Professor, Ob-Gyn Department, UAB School of Medicine (5); Dr. Robert Barnett, Clinical Professor, Private Practitioner, UAB School of Medicine (6); Dr. John Huddleston, Assistant Professor, Ob-Gyn Department, UAB School of Medicine (8).

Heart Association To Sponsor Cardiac Care Classes

The Alabama Heart Association has adopted as a primary program for 1973-1974 the sponsorship of Cardiac Rehabilitation Classes for myocardial infarction patients and their families.

The classes are to be conducted on a six-week basis and have as their stated goal, "to help the patient and his family adjust to his illness as well as his future life situation."

Presently classes are being set in "pilot" cities—Huntsville, Tuscaloosa, Mobile and Dothan. If the pilot program proves successful in these areas, more cities will be added to the program during the year.

The program is designed for the cardiac patient who is at least 10 to 12 weeks post myocardial infarction. It is not set up for referrals by physicians. Physicians can tell myocardial patients about the classes. It is not necessary for an applicant to have a referral form from a physician to gain entrance to the class.

Although the course is designed for the post-coronary patient and his family, the classes will also serve to educate people considered to be high risk candidates for heart disease.

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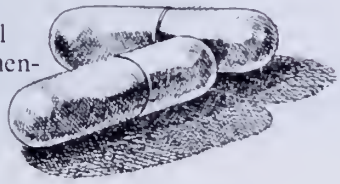
·Ielps reduce ınxiety-related G.I. symptoms

\ patient may blame his attacks of gastritis or luodenitis on "something he ate" but contributng faetors may be his job, narital problems, financial vorries or some other unmenioned souree of stress and :xcessive anxiety that ·xacerbated the eondition. Vhether it is "something ıe ate" or "something eating him," adjunetive .ibrax can help. Librax offers both the antianxiety ction of Librium® (ehlordiazepoxide HCl), that ean ıelp relieve excessive anxiety, and the dependable ıntieholinergic action of Quarzan® (elidinium Br), hat can help reduce gastrointestinal hypermotility ınd hypersecretion.



Patient-oriented dosage — up to 8 capsules daily in divided doses

For optimal response, dosage ean be adjusted to suit patient needs—1 or 2 eapsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

adjunctive

Librax®

ROCHE

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

3efore prescribing, please consult complete product information, ı summary of which follows:

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction: known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

(Continued from Page 341)

Jared, O. Alan, III, Birmingham, Alabama to 2815 Seacrest Blvd., Boynton Beach, Florida 33435.

Meador, Clifton Kirkpatrick, Birmingham, Alabama to 2000 Hayes Street, St. Thomas Hospital, Nashville, Tennessee 37203.

Miller, James A., Birmingham to 520 Midway Street, Midfield, Alabama 35228.

Payne, Thomas Jefferson, Birmingham to Lloyd Noland Hospital, Fairfield, Alabama 35064.

White, Boyce Joseph, II, present Birmingham to 905 Valley Ridge Rd., Birmingham, Alabama 35209.

Whites, Jack Cannon, present Birmingham to P. O. Box 3387-A, Birmingham, Alabama 35202.

Marengo County

Fitz-Gerald, Maurice Joseph, present Demopolis to Box 935, Demopolis, Alabama 36732.

Mobile County

Bucher, Robert Monroe, present Mobile to 220 C Nack Lane, Mobile, Alabama 36608.

Carlin, John Thomas, Jr., present Mobile to Doctors Hospital, 1700 Center Street, Mobile, Alabama 36604.

Montgomery County

Hubbard, Thomas Brannon, present Montgomery to 1145 South Perry Street, Montgomery, Alabama 36104.

Rosen, Herman Leon, present Montgomery to 2337 Wildwood Drive, Montgomery, Alabama 36111.

Pickens County

Douglas, George Capers, Carrollton to West Columbus Highway, P. O. Box G, Reform, Alabama 35481.

NEW TELEPHONE NUMBERS

Chase, Thomas M., Lee 745-6447

Hughes, Andrew J., Elmore 283-6160

Jarvis, Garth L., Lee 826-4416

Mayfield, James R., Lee 749-1650

Owings, Jon Michael, Lauderdale 766-1901

Upshaw, Marge L. H., Macon 727-5763

Wilcoxson, Glen P., Lauderdale 764-8321

Yoder, Robert L., Jr., Lauderdale 764-5351

CHANGE OF SPECIALTY

Bullock County

Fisher, Gilbert Eugene, Route 3, Union Springs, Alabama 36089. ALR.

CORRECTIONS

Jefferson County

Johnson, Leslie Donald, change Zip Code to 35205.

Ultrasound Technique Detects Venous Disease

Investigators at The Medical College of Pennsylvania have reported that a recently completed study of the prevalence and incidence of venous disease, using the Doppler ultrasound technique, indicates that a significant proportion of venous thrombosis in the post-operative period has its origin prior to surgery.

To a large extent, the type of operation performed determines the likelihood of venous thrombosis, they found. Operations performed on the lower extremities pose a particular hazard and this is especially true of operations designed to improve circulation in patients suffering from arteriosclerotic occlusive disease. The most important risk factor in patients undergoing non-lower extremity surgery is patient inactivity prior to operation. Further, preliminary data indicates that risk factor analysis can identify the patient very likely to suffer a pulmonary embolism.

Hill Crest HOSPITAL

For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospital, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

PSYCHIATRISTS:

James K. Ward, M. D.
Hardin M. Ritchey, M. D.
F. Joseph Nuckols, M. D.
James A. Greene, M. D.
Charles W. Moorefield, M. D.

ADMINISTRATOR:

Robert V. Sanders

DIRECTOR OF SOCIAL SERVICES:

James T. Kemp, A. C. S. W.

HILL CREST HOSPITAL

Hill Crest Foundation, Inc.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: 205-836-7201

(Continued from Page 311)

fields are needed. Besides the traditional hospitals, there are multi-purpose neighborhood family health centers, home health agencies, comprehensive health-planning bodies, community mental health centers and regional medical centers, to name a few.

Because of this, the four year health care management course is designed to train a wide range of specialists—accountants, social workers, financial officers, purchasing officers, medical sociologists, health planners, hospital engineers, computer programmers and analysists.

Just as the program will draw heavily from the established schools at the University, so it will also draw from community resources. Experts in health care fields will participate in developing the program.

The community and the program will also work together in providing an approved health care institution for career orientation, giving students an opportunity for internship.

This internship is not to be confused with the internship of soon-to-be resident doctors, Mr. Hinckley said. In fact, he warned about confusing the baccalaureate program of health care management with existing graduate programs in health care administration.

"Our undergraduate program is designed to complement rather than compete with existing graduate programs, such as the one at the University of Alabama in Birmingham's Medical Center. Many of our students will doubtless enroll for courses there after completing health care management courses here," Mr. Hinckley explained.

Dr. Donald Snow:

Politics Is His Special Passion

Dr. Donald Snow, assistant professor of political science, tucks away bits of information in his head, from trivia to major intellectual themes. As Director of International Studies, a new major degree program at The University of Alabama, Dr. Snow asks that his students also be collectors of information.

More important, he asks that they expose themselves to a wide range of perspectives, to reach the goal of greater intercultural understanding between peoples. The social studies form only the core of the curriculum. Students are free to delve into philosophy, literature, psychology and foreign languages as well.

"Though rigorous, our program offers really attractive classes, and the beauty of it all is that the student has a wide range of courses to choose from. The graduation requirement is 106 hours of course work which may be chosen from a field of 250 hours," Dr. Snow said. It is a good solid liberal arts degree but exposes students to a far wider range of perspectives than is required of the average liberal arts graduate.

"I frankly don't expect a terribly large number to choose it as a major," Dr. Snow, who at present knows of 30 students in the program, stated. "The two year foreign language requirement and the general concensus that there are no Mickey Mouse courses in international studies separates the serious student from the not-so-serious one."

International studies appeals to the student striving for a "man of all seasons" roundness of intellect. And the man behind the program is as diverse in his interests as the program. His interests range from tending his rose and vegetable gardens (not especially an organic farmer, he says, "I try anything to get those devils to appear!") to playing football and tennis.

Dr. Snow's paintings of peace signs, adorning the walls of his tiny office, are juxtaposed with scores of books, many dealing with the causes of war and revolution. Just such a book is *Patterns of Violent Conflict* written by Dr. Snow himself and only recently added to his shelves. His books run the gamut from Margaret Mead's analysis of primitive cultures to Mao's theory of guerrilla warfare.

Reprinted from *Alabama Alumni News*

Committee Recommends National Health Education Center

Creation of a National Center for Health Education to help individuals prevent sickness and enhance their health has been recommended by the President's Committee on Health Education.

The 17-man Committee appointed by President Nixon two years ago to examine and assess the state of the nation's health education effort met with the President on September 25 and reported that:

"While the need and demand for health care services have been rising, health education has been neglected. Many, perhaps most major causes of sickness and death can be affected—and some prevented—by individual behavior, yet the whole field of health education is fragmented, uneven in effectiveness and lacks any base of operations.

The Committee said that of $75-billion spent last year for medical, hospital and health care—more than $200-million a day—about 92 per cent is spent for treatment after illness occurs. Of the remaining amount, more than half is spent for biomedical research. Public health, prevention of illness, and health education share the balance, with health education receiving—less than half of one per cent.

The Committee told the President that any changes or improvements in the delivery and financing of health care will be virtually nullified unless there is, at the same time, an improvement in health education—"which means not just supplying information about health to people, but motivating them to accept the information and put it to work in their daily lives."

The Committee reported that school health education programs are handicapped by "antiquated laws, indifferent parents, unaggressive school boards, teachers poorly equipped to handle the subject, lack of leadership from government or the public, lack of funds, lack of research, lack of evaluation—all of those hobble a comprehensive program that could provide the nation's 55-million school children (one-fourth of the entire population) with adequate health education of an interesting, pertinent and objective nature.

The Committee said that virtually all of the 10 major causes of sickness and death in the United States could be affected by individual behavior, but that there was no national entity nor national effort which could help bring about desired changes in attitudes or motivation. This was a function it said could be filled by the proposed new Center.

The proposed agency would be a private, nonprofit organization authorized by Congress and financed by both the federal government and private sources. Its principal functions would be carried out by five operating divisions:

1. Division for Research in Health Education.
2. Division for Demonstration Programs in Health Education.
3. Clearing House for Health Information and Education.
4. Division for Communications in Health Education.
5. Division for Community Health Communication Centers.

The Committee said it recommended the Center be run by a board of 25 persons to be appointed by the President and confirmed by the Senate. They should represent major groups concerned with health, as well as representatives of the consuming public, government, commerce and industry, labor, voluntary health organizations, insurance and pre-payment carriers and others.

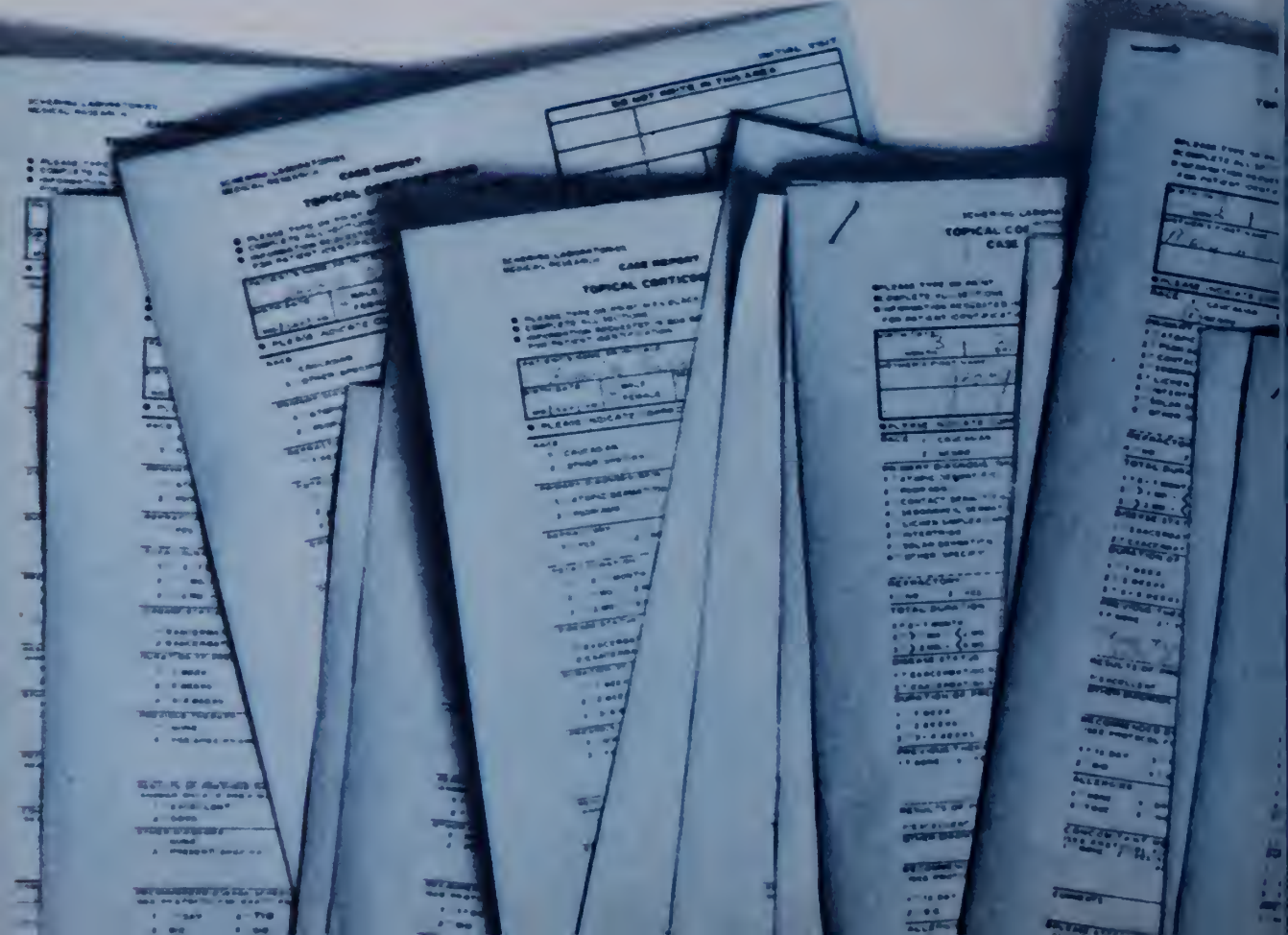
A topical steroid that has clinically succeeded

in study...after study...after study[1-6]

Excellent/good results

85% in psoriasis *(150 of 177 patients)*[1]

92% in atopic ecz *(231 of 251 patients)*[1]



Schering

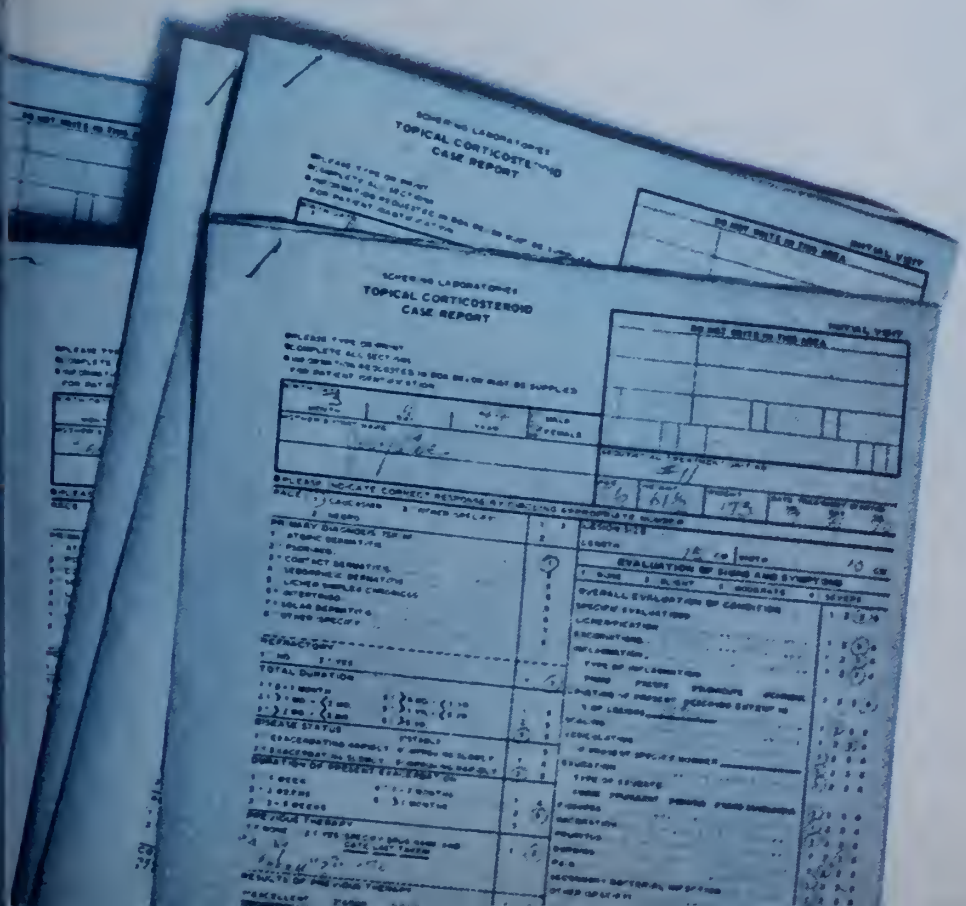
Valisone

brand of

betamethasone valerate (0.1%) Cream/Ointment

Plus economy *B.i.d. dosage often found effective!*
Available in 5, 15, and 45 Gm. tubes.

96% in contact dermatitis
(81 of 84 patients)[1]



CLINICAL CONSIDERATIONS:

Description VALISONE products contain betamethasone valerate (9-fluoro-11β,17,21-trihydroxy-16β-methylpregna-1,4-diene-3,20-dione 17-valerate). Each gram of VALISONE Cream 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in a soft, white, hydrophilic cream of water, mineral oil, petrolatum, polyethylene glycol 1(monocetyl ether, cetostearyl alcohol, monobas sodium phosphate, and phosphoric acid; 4-chloro-m-cresol is present as a preservative. E gram of VALISONE Ointment 0.1% contains 1.2 mg. betamethasone valerate (equivalent to 1.0 mg. betamethasone) in an ointment base o liquid and white petrolatum, and hydrogenate lanolin. VALISONE Cream and Ointment contain no parabens.

Indications VALISONE Cream and Ointment are indicated for the relief of the inflammatory manifestations of corticosteroid responsive dermatoses.

Contraindications VALISONE Cream ar Ointment are contraindicated in vaccinia and varicella. Topical steroids are contraindicated those patients with a history of hypersensitivit to any of the components of the preparation.

Precautions If irritation develops with the use of VALISONE Cream or Ointment, treatment should be discontinued and appropriate therapy instituted. In the presence of an infection, the use of an appropriate antifungal or antibacterial agent should instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled. If extensive areas are treat or if the occlusive technique is used, the possibility exists of increased systemic absorption the corticosteroid and suitable precautions sh be taken. Although topical steroids have not been reported to have an adverse effect on pre nancy, the safety of their use in pregnant fema has not been absolutely established. Therefor they should not be used extensively in pregna patients, in large amounts, or for prolonged periods of time. VALISONE Cream and Oint ment are not for ophthalmic use.

Adverse Reactions The following local adverse reactions have been reported with topical corticosteroids: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneform eruptions, and hypopigmentation. T following may occur more frequently with occlusive dressings than without such therapy maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.

Dosage and Administration Apply a thin film of VALISONE Cream or Ointment to th affected skin areas one to three times a day. Clinical studies of VALISONE have indicate that dosage only once or twice a day is often feasible and effective. AUGUST 1972

For more complete details, consult Sche literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

References: *(1) Files of Headquarters Medical Research Division, Schering Corporation. (2) Carter, V. H., and Noajin, R. O.: Curr. Therap. Res. 9:253, 1967. (3) Falk, M. S.: Cutis 2:788, 1966. (4) Goldblum, R. W.: Pennsylvania Med. 69:50, 1966. (5) Nierman, M. M.: J. Indiana M. A. 10:1184, 1966. (6) Zimmerman, E. H.: Arch. Dermat. 95:514, 1967.*

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Animal Research On Congenital Diseases

Animal experimentation and its importance to the study of congenital diseases was the subject of a major address at an international scientific conference held recently in Vienna, Austria.

Prof. Charles R. Scriver, a researcher at the Montreal Children's Hospital, told some 800 birth defect experts that he is confident that a wide range of congenital diseases not considered incurable may eventually respond to a form of medicinal management.

He emphasized that before diseases like Sickle-cell anemia and Tay-Sachs can be controlled in a manner not unlike that used to control diabetes, it will be necessary to conduct a great deal of test-tube and animal experimentation.

Prof. Scriver advised against premature use of techniques or medical treatment even though "there is a strong desire to apply to the patient, as quickly as possible, compelling findings often derived from (test-tube) observations."

He said, "Hopes may be raised for patients and their families on the basis of incomplete or possibly even wrong preliminary evidence."

The Canadian researcher pointed out to conference participants that "money spent on more intensive investigation of animal models could be a very fruitful way to gain certain types of information in an ethical and scientific manner while avoiding harm to human subjects through an erroneous rush to treatment."

Genetic Defects Study

Mann-Chiang Niu, professor of biology at Temple University, has been awarded a March of Dimes research grant of $28,000 to continue his research into the function and characteristics of deoxyribonucleic acid (DNA) and its ancillary, ribonucleic acid (RNA) in the formation of inherited genetic defects.

Dr. Niu is presently studying dwarfism, and working with a group of 1,500 dwarf mice in an effort to learn whether dwarfism, and other types of inherited defects, can be cured in subsequent generations of mice by the injection of "messenger" ribonucleic acid (mRNA) extracted from pure, normal cells.

In his work, Dr. Niu extracts mRNA from the sexual glands of normal mice and injects it into fertilized eggs of the dwarf mice. Since the dwarf mice are deformed as the result of an inherited pituitary deficiency, Dr. Niu theorizes that if sufficient normal mRNA enters egg cells of the deformed mice, it could stimulate normal pituitary formation and thus prevent the dwarfing of future generations.

If successful, Dr. Niu's approach could lead to the treatment of certain hereditary defects by genetic/cellular engineering.

"Many people fear genetic/cellular engineering," said Dr. Niu, "but whether we like it or not, it is here to stay. The question that remains to be answered is what we choose to do with it. Properly used, it can prove one of the greatest blessings in many years. It could be used to cure inherited genetic defects and perhaps it could find useful application in cancer research as well. Improperly used . . . I shudder to think what it might bring about.

Help At Last For Sufferers Of Hypoglycemia

One out of every ten Americans probably suffers from hypoglycemia, a disorder of the endocrine system characterized by low blood sugar (hypoglycemia is the opposite of diabetes). While diagnosis is sometimes difficult, treatment is relatively simple, centering on strict adherence to a high-protein, low carbohydrate diet. (The hypoglycemic must eat a protein snack every two hours for the rest of his life!) However meals without sugar and starches can be boring and repetitious—often leading to chronic depression and uncontrolled food binges—which can seriously impair the health of a patient.

Now Margo Blevin and Geri Ginder come to the rescue with a new cookbook containing over 800 kitchen-tested recipes, from appetizers to sugar-free desserts, including substitutes for forbidden favorites (such as high protein bread and pasta), and imaginative new creations from Chinese, Italian and Mexican cuisines (with sugars and starches removed, and protein added). *And* there are special chapters on cheese, eggs and fish, the three most economical sources of protein.

The authors outline an easy-to-follow unit system for planning menus, and show how to introduce almost limitless variety into a restricted diet. They give suggestions for entertaining at home, ordering in restaurants, feeding hypoglycemic children and teenagers, holiday menus, "emergency kit" snack, and shopping—including an invaluable listing of foods by brand names.

THE LOW BLOOD SUGAR COOKBOOK is more than just a collection of recipes. It is life-saving advice on how to change your eating habits—*and* your life as a hypoglycemic.

Geri Ginder and Margo Blevin are New Jersey housewives with a total of eight hypoglycemics in their combined families. Over the years, the two women developed a friendly rivalry to see who could develop the most unusual and appealing recipes that avoided forbidden foods. They eventually found themselves with the hundreds of dishes that fill this book, which has been prepared with the advice of Herbert B. Goldman, M. D., a leading authority in the field of hypoglycemia.

Two Methods Of Early Cancer Detection To Be Tested At Emory

Medical scientists at the Robert Winship Memorial Clinic, an inter-departmental cancer group within the Emory University Clinic, are preparing to test two methods of early cancer diagnosis which are yielding promising results in clinical trials elsewhere.

One of the techniques being used involves a study of substances found in tissue biopsies from malignant breast tumors and in the blood of patients who undergo surgery for breast cancer. These substances are proteins called immunoglobulines which are formed by the body's immunological system. The immunoglobulines will be studied in the laboratory in an effort to find a clinical test to differentiate between benign, pre-malignant and malignant lesions of the breast. Such a test, if successful, would permit doctors to diagnose early cancers, enabling them to better manage this disease.

A second method to be investigated at Emory is the Makari tumor skin test which has been used with human subjects in the U. S. and several foreign countries. The Makari test is a technique for detection of circulating cancer-specific antigens in the blood. Trials of the new techniques of early cancer diagnosis will begin at Emory next year (1974).

Other research projects under way at the new Emory laboratory include a study to determine the best amount of radiation dosage for cancer patients—in particular, how to fractionate the right amount of radiation over varying periods of time; and several other investigations devoted to increasing the effectiveness of radiation therapy of cancer.

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia, malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions

Chewable
Tablets 500 mg
Mintezol®
HIABENDAZOLE | MSD)

o easy to take
veryone in the family
an keep to the
egimen you prescribe

de: fever, facial flush, chills, conjunctival injection, oedema, anaphylaxis, skin rashes, erythema multiforme uding Stevens-Johnson syndrome), and lymphadenopathy.
plied: Chewable tablets, containing 500 mg thiabendazole, oxes of 36, strip packaged, individually foil wrapped; pension, containing 500 mg thiabendazole per 5 ml, in les of 120 ml.

more detailed information, consult your MSD representa- or see full prescribing information. Merck Sharp & ne, Division of Merck & Co., INC., West Point, Pa. 19486

addendum

MSD
MERCK SHARP & DOHME

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

ALABAMA MEDICAL REVIEW, INC.

A Presentation before the
Public Health Service
August 28, 1973

The purpose of this presentation is to respectfully request that Alabama Medical Review, Inc., a legally constituted corporation under the Alabama Non-Profit Corporation Act, be designated under the Provision of Public Law 92-603 as the Professional Standards Review Organization for the State of Alabama. In making this application, it is contemplated that experience may dictate the necessity for establishing one or more divisions of the State to serve as "satellite organizations" to achieve administrative efficiency and economy.

In compliance with Public Law 92-603 and such other regulations as may be issued in implementation of this law, Alabama Medical Review, Inc. proposes to fulfill all requirements which will insure that the services for which payments are made by the Federal Government are (1) medically necessary and (2) provided in accordance with highest professional standards. It is not possible or feasible, until the question of area designation for PSRO responsibility is determined, to describe in detail the methods by which this objective will be attained.

Therefore, this presentation will deal solely on the practicability of designating Alabama Medical Review, Inc., as the single state agency to formulate and organize the PSRO Program in this State.

HISTORY: Long before HR 1, the Social Security Amendments of 1973, was passed by the Congress and signed by the President as Public Law 92-603, the Medical Association of the State of Alabama was cognizant of the important role which physicians would be required to play if the purposes of the law were to be accomplished. While there was not, and does not now exist, unanimous agreement among the physicians of Alabama on either the necessity or pragmatic potential for success of this program, it was unanimously agreed by the leadership of this Association that Alabama physicians should not evade their civic responsibility to cooperate with the Federal Government. It was with this identical attitude that the Association received the passage of the Medicare and Medicaid laws.

At its meeting on September 27, 1972 the Board of Censors, acting for the Medical Association of the State of Alabama, directed its legal counsel to prepare Articles of Incorporation for Alabama Medical Review, Inc., a non-profit corporation with membership open to all doctors of medicine and Osteopathy licensed to practice in this State, with each member having equal voting privileges and equal rights of participation in every function of the Corporation.

These Articles of Incorporation were duly presented, and approved by the Board of Censors on December 20, 1972, and recorded as law requires in the office of the Secretary of State on December 22, 1972 (Exhibit A).

Subsequently, at the 1973 Annual Session held at Mobile, Alabama on April 14, 1973, the College of Counsellors and House of Delegates, representing every county medical society in the State of Alabama, unanimously approved the Articles of Incorporation, thereby according full support to the actions previously taken by the officers and governing board of the Association.

In the interim considerable study has been undertaken by medical organizations at both the county and state levels as to the most logical method for implementation of the PSRO Program in Alabama. This study includes the use of consultation materials for designation of areas prepared and provided by the United States Department of Health, Education and Welfare. A conference with a committee of representatives from the Alabama Hospital Association was held so the Association could avail itself of the knowledge of other health professionals.

All those who have participated in studying the problem of area designation are agreed that the distribution of population, physician services and location of hospitals make it almost mandatory that the initial organization of the PSRO Program in Alabama should be undertaken by a single agency. The patterns of providing medical and hospital care are not established along regional lines. The location of a single medical center in Jefferson County results in state-wide consultative and referral linkage radiating to and from this center. While large medical communities and outstanding hospital facilities exist in other communities of Alabama, the unique conjunction of urban and rural practitioners to the medical center exists throughout the State.

In all conferences held to date, it has been recognized that actual experience may dictate the establishment of "satellite agencies", and there may even be some argument for creation of a separate PSRO structure in one or more geographic areas of Alabama. However, it is respectfully requested that any such action along this line be taken after a program is developed and data has been collected to substantiate the need.

Until recently, there was no accurate data relating to the exact number of physicians in active practice in this State. The Office of Comprehensive Health Planning, the Medical Services Administration (Medicaid), and other government agencies, and even the American Medical Association, have used rough estimates based largely on the number of physicians licensed by the State of Alabama and having in-state addresses.

Within the past two months the Medical Association has undertaken a county-by-county survey of active, practicing physicians—both members and non-members of the Medical Association of the State of Alabama. The results of this survey have been accepted by the Office of Comprehensive Health Planning and the Medical Services

(See next Page)

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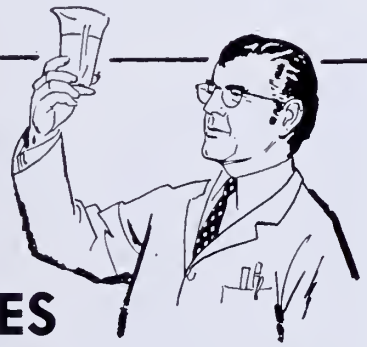

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Administration (Medicaid) as the most accurate to date.

This survey (Exhibit B) shows there are 2,362 licensed medical doctors in active practice within State boundaries. There are an additional 61 who are in semi-retirement, practicing 20 hours or less per week.

According to the area designation guidelines, a PSRO area should generally include a minimum of approximately 300 licensed, practicing physicians with a maximum not to exceed 2,500 licensed, practicing physicians. Counting the nine (9) licensed doctors of Osteopathy, the State of Alabama falls below the maximum recommended for establishment of a single state PSRO area.

In addition to the aforementioned points, the strongest objection to an immediate establishment of more than one PSRO in Alabama is recognition of the acute shortage of manpower and expertise in the collection and analysis of required data, a fact which would jeopardize the success of the program at its inception. The results of our study in addition to the requirements of PSRO guidelines direct this Association to respectfully request that the application of Alabama Medical Review, Inc., be approved.

In conclusion, it can be stated that the physicians of Alabama will individually and collectively do everything in their power to work for the success of the PSRO Program. In a limited manner it has gained some experience in Peer Review procedures, having established in 1970, in cooperation with Alabama Medical Services Administration (Medicaid), a total of 20 local Peer Review committees with the responsibility for reviewing claims submitted for reimbursement for medical services. The function of the local Peer Review Committee subsequently was enlarged to provide for review of claims questioned by commercial carriers of health insurance. At this writing, approximately 80 contested claims have been resolved by the Peer Review mechanism. Despite the fact that an overwhelming majority of these have been decided against the physicians, there has been almost overwhelming support of the concept of Peer Review and it is likely that some phases of the District Peer Review Plan will be incorporated into the PSRO Program should Alabama Medical Review, Inc., be designated as the PSRO Agency for Alabama.

It is recognized that utilization review activity within institutions should be absorbed into the PSRO Program when it is functioning satisfactorily. It will be one of the first purposes of Alabama Medical Review, Inc., to take whatever actions are necessary to utilize those institutional review operations which meet the standards, by instituting effective educational programs directed toward specific problems which may exist.

Alabama Medical Review, Inc., and its sponsoring body, the Medical Association of the State of Alabama, will welcome the opportunity to demonstrate its capability of performing the duties conferred upon the medical profession by Public Law 92-603, and will submit, as required, detailed plans for the organization and implementation of the PSRO Program.

SCIENTIFIC FILMS

ROENTGEN ANATOMY OF THE NORMAL HEART, 25 minutes, black and white, sound. The film is edited and narrated by F. Mason Sones, Jr., M. D. It uses segments of cineangiographic film to depict the anatomy of the heart, including systemic and coronary circulation.

ROENTGEN ANATOMY OF THE NORMAL ALIMENTARY CANAL, 27 minutes, black and white, sound. Edited by Theodore A. Tristan, M. D. Segments of cinefluorographic film are used to depict the anatomy of the G. I. tract from throat to colon.

ROENTGEN ANATOMY OF THE NORMAL URINARY SYSTEM, 33 minutes, black and white, sound. Edited by J. Scott Dunbar, M. D., and M. B. Nogrady, M. D. Segments of cinefluorographic film are used to depict the anatomy of the normal urinary system.

Alabama Study On Leukemia And Hodgkin's Disease

The University of Alabama-Birmingham (UAB) Medical Center has been selected as one of seven national "primary" centers to work with physicians in treating children with acute lymphocytic leukemia, and patients with Hodgkin's disease.

Dr. Hernan Moreno, associate professor of pediatrics, and director of UAB's Pediatric Hematology-Oncology Division, said UAB will receive $85,000 annually for the next three years from the National Cancer Institute to establish satellite treatment centers in numerous Alabama communities.

Dr. Moreno said the program is designed to channel information compiled at medical centers across the nation to local physicians, enabling them to administer day-to-day treatment to their patients.

While UAB doctors have worked closely with local physicians in the past, the annual grant from NCI will provide an expansion of service to local physicians and their patients.

Lead Paint Detector Designed

A device similar to one used in moon exploration has been designed by University of Chicago scientists for an important mission on earth—detecting poisonous leaded house paint so dangerous to children.

Such paint often is found in older homes, in inner cities especially, and small children who eat flakes from peeling walls can suffer brain damage.

The new device works like a Geiger counter; an operator simply holds the two-pound unit near walls or other painted surfaces and gets a lead content "count" which is shown in red numbers. The count is made by a stream of alpha particles, similar to X-rays, which shoot out of the device, bounce off the painted surface and return to a silicon detector. A rechargeable battery powers the unit, which can be operated by semi-skilled personnel.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; shonld these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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The American Psychiatric Associ

The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

Jnt Statement on Antisubstitution Laws and Regulations

The purpose of this statement is affirm the support of the participat- organizations for the laws, regula- nsand professional traditions which hibit the unauthorized substitution drug products.

Traditionally, physicians, den- s and pharmacists have worked peratively to serve the best inter- s of patients. Productive coopera- has been achieved through tual respect as well as a common cern for the ideals of public vice. This mutual respect has been ected, in part, by joint support r the years for the adoption and orcement of laws and regulations cifically prohibiting unauthorized stitution and encouraging joint ussion and selection of the rce of supply of drug products. basic principles of medical, den- nd pharmacy practice are thus zed and preserved in the interest atient welfare.

The antisubstitution laws have obstructed enhancement of the essional status of pharmacy any e than they have in and of them- es guaranteed absolute protec- from unsafe drugs, or freed icians, dentists and pharmacists their responsibilities to patients. practical matter, however, such and regulations encourage inter- essional communications regard- drug product selection and assure profession the opportunity to cise fully its expertise in drug e, to the advantage of patients.

Physicians and dentists should ged to increase the frequency egularity of their contacts with macists in selection of quality products, recognizing that economies to patients can be improved through such communication, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selection remain primary and do not permit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthorized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

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Brief Summary

Indications—Placidyl (ethchlorvynol) is indicated as short-term hypnotic therapy in the management of insomnia.

Contraindications—Drug hypersensitivity and porphyria.

Warnings—Not recommended during the first and second trimester of pregnancy. Caution patients of possible combined exaggerated effects with alcohol, barbiturates, tranquilizers or other CNS depressants. Exaggerated effects might result in blurring of vision, paralysis of accommodation and profound hypnosis. Caution patients concerning driving a motor vehicle, operating machinery, or other hazardous operations requiring alertness after taking the drug. ADMINISTER WITH CAUTION TO PATIENTS WITH SUICIDAL TENDENCIES AND DO NOT PRESCRIBE LARGE QUANTITIES OF THE DRUG. Adjustment of the dosage of oral anticoagulants might be necessary when beginning ethchlorvynol therapy, during therapy, or after stopping therapy. This drug is not recommended for use in children. PLACIDYL HAS THE POTENTIAL FOR THE DEVELOPMENT OF PSYCHOLOGICAL AND PHYSICAL DEPENDENCE. INSTANCES OF SEVERE WITHDRAWAL SYMPTOMS, INCLUDING CONVULSIONS AND DELIRIUM CLINICALLY SIMILAR TO THOSE SEEN WITH BARBITURATES, HAVE BEEN REPORTED IN PATIENTS TAKING REGULAR DOSES AS LOW AS 1000 MG. PER DAY OVER A PERIOD OF TIME WHEN THE DRUG WAS SUDDENLY DISCONTINUED. PROLONGED ADMINISTRATION OF THE DRUG IS NOT RECOMMENDED. Addiction-prone patients or those who are likely to increase dosages of the drug on their own initiative should be observed for evidence of signs or symptoms which may indicate possible early withdrawal or abstinence symptoms. Signs and symptoms associated with withdrawal and abstinence include unusual anxiety, tremor, ataxia, slurring of speech, memory loss, perceptual distortions, irritability, agitation and delirium. Other less well defined signs and symptoms, not necessarily due to withdrawal and abstinence, may include anorexia, nausea or vomiting, weakness, dizziness, sweating, muscle twitching and weight loss. Abrupt discontinuance of Placidyl following prolonged overdosage may result in convulsions and delirium.

Precautions—Toxic amblyopia has been reported with long-term continuous use of ethchlorvynol. Permanent visual defects have been observed, although amblyopia has improved after discontinuation of the drug. Drug dosage should be limited for elderly and debilitated patients to the smallest effective amount. If pain is present, this drug should only be given if insomnia persists after pain is controlled with analgesics. Caution is advised in prescribing the drug for patients who are being treated with either MAO inhibitors or antidepressants. Transient delirium has been reported with the combination of Placidyl and amitryptyline. Drug dosage should be reduced if prescribed for patients receiving MAO inhibitors or antidepressants. Caution should be exercised in patients with impaired hepatic or renal function. Patients who respond unpredictably to barbiturates or alcohol, or who exhibit excitement and release of inhibition in association with such agents, may also react in this way to Placidyl. Rarely, patients may exhibit symptoms suggestive of an unusual susceptibility to the drug; such as prolonged hypnosis, profound muscular weakness, excitement, hysteria, or syncope without marked hypotension. Transient giddiness or ataxia may occur.

Adverse Reactions—Hypotension, nausea or vomiting, gastric upset, aftertaste, blurring of vision, dizziness, facial numbness, and allergic reaction typified by urticaria have been reported following Placidyl administration. Mild "hangover" and symptoms of mild excitation have occurred in some patients. There have been rare reports of cholestatic jaundice occurring in patients taking ethchlorvynol. A few cases of thrombocytopenia have been reported in patients receiving ethchlorvynol. 304431

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President's Page

Reflections On 1973

I feel that it is appropriate at this time to pause and consider some of the more important things which have happened during 1973.

Number one—the completion of the headquarters building has exceeded my fondest expectations. The inside of the building is perfectly beautiful. We now have, for the first time, a room large enough for the Board of Health to meet, along with its guests, in a reasonable state of comfortableness. We have a number of offices which are now equipped well enough to be a real credit to our Association. We also now have sufficient space for the printing room and presses to be run in an orderly and proper manner. I feel that we all need to congratulate the building committee which has been chaired by our good friend, Dr. Hutchinson, for the great job the committee has done. I hope that each and every member of this Association when they are near Montgomery will take time to stop by and see for themselves the wonderful new structure which has been recently completed. We want all of our members to feel that this is home when they are in Montgomery. And I'm sure I reflect the feelings of Mr. Patterson and his excellent staff in welcoming you to visit with them when you are in the area of Montgomery.

The second most important thing, I feel, is the insurance program. We have done quite well for the first year. We could be doing a great deal better. I feel that those who have not yet joined the Wausau program should reconsider their position. We have a great deal to offer, point number one is the Association gets a small fee for handling this business. Point number two is that you have, on request, physician investigation into any claim which may be

DR. CAMP

pending or threatened against you. And last, but not least, we have saved the doctors of this state thousands of dollars in premiums even for the first year. As you may remember the carrier agreed at the end of two years to make known to us their profit-loss sheet. In this way we can know whether they are making money or losing money. We also will know whether or not rates can remain the same, be reduced, or be increased because of a bad loss situation. So far we have had a very excellent record with no serious losses at this time. If you possibly can join your fellow physicians in our insurance program please do so. We also have going on at this time one of the most important tasks which this association is likely to undertake in the next few years —the rewriting and updating of our constitution. Our constitution has not been revised since 1877 and amendments were not filed with the Secretary of State until recently. The committee on rewriting the constitution is hard at work and shortly after the first of the year we are going to have a called meeting of the delegates and counsellors to consider revision of the constitution. We urge all of you to be sure that

(Continued on Page 370)

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Yes, Doctor, you or your estate can be sued for malpractice up to 20 or 25 years from the time of the alleged event. Where will your malpractice insurance carrier by then? Well, when you're covered under your MASA sponsored malpractice insurance program, you can count on the reliability of a billion-dollar insurance company . . . Employers Insurance of Wausau. And financial strength and stability is just one of the ways you benefit yourself — and the entire Alabama medical community — when you subscribe to this coverage. For information on additional benefits, contact **MASA Insurance Department, 19 South Jackson Street, Montgomery, Alabama 36104, Or call (800) 392-5668 toll free.**

EMPLOYERS INSURANCE OF WAUSAU EMPLOYERS INSURANCE OF WAUSAU EMPLOYERS INSURANCE OF WAUSAU

The Woman's Auxiliary

President, Mrs. Robert W. Grady
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WAMASA Editor, Mrs. William L. Smith

AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

We Can End Isolation For The Senior Citizen

The five million older people in the United States living alone are in special jeopardy from falls, strokes, and sudden illness. But hundreds of thousands of them—even those who are mobile and could participate—live in virtual isolation. For these people, a telephone call at an arranged time once a day could mean the difference between life and death, or between complete recuperation and permanent disablement.

A Telephone Reassurance Service ("Tele-Care", "Telephone Buddy", or "Telephone Lifeline") is an organized volunteer program where elderly or incapacitated persons living alone are called to check on their well-being. If the person does not answer at the appointed time, an emergency life line goes into immediate action. As prearranged, a neighbor, nurse, or policeman makes a house call. If a medical crisis is discovered, the older person's doctor is called and relatives are notified.

Every community has elderly persons living alone. Many different telephone services, obviously a boon to the nations aged men and women, has been adapted in many communities and is spreading fast. Any town or individual can inaugurate such a service.

Even where no service exists, fear can be alleviated by a simple arrangement between loved ones and friends. Two or more elderly people can agree to call one another daily. This lessens the loneliness felt by so many aging Americans.

Sponsors must be found. A medical auxiliary or another sponsoring group could do this program. Aid from other groups should be enlisted. Auxiliary members can do volunteer calling. The purpose of the plan is to help satisfy the desire of older people to live independently by eliminating some of the dangers that are incurred by living alone.

MRS. GRADY

Other services that can be made available to the senior citizen are: transportation, senior centers, nutrition programs, friendly visiting, in-home services, opportunities to serve, outreach services, and information and referral for their needs.

The Art Of Age a 16 mm., color, sound, 25 min. movie demonstrates what people do to overcome loneliness and inactivity which frequently accompanies age.

Betty Grady

Betty Grady, President

(Continued from Page 367)

you are represented by your counsellors and delegates at this special meeting. If there is anything that you do not like about the constitution this will be the time to so state. We have also seen the reconstitution of the committee on public health. This I believe may turn out to be to the advantage of all concerned in the years to come. I realize of course that all of the members of this Association do not share your president's views on this subject. Only time will tell the true story.

I wish all of you a Merry Christmas and a happy prosperous New Year.

E. E. Camp, M. D.
President

Survey On Ambulatory Medical Care

The first attempt to produce national statistics on the use of ambulatory services in the U. S. is being undertaken by the National Center for Health Statistics in the form of the National Ambulatory Medical Care Survey. The survey will cover more than 1,700 physicians in patient care practices throughout the U. S. Participating physicians are being asked to report on a portion of their office visits during one week of practice. Information collected will include demographic characteristics, symptoms, complaints, and medical problems of patients, and the actions taken by physicians in response to the problems. Data will be related to various physician characteristics, including specialty, type of practice and geographic location. The first statistics will be available next fall and will be used as a base for planning and organizing health services, assessing facility and manpower requirements, and determining changes in medical education programs.

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.
Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.
Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).
Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.
There is no experience in pregnant women who have received this drug.
Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.
Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.
Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.
CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)
Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.
How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.
ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Clean sweep

with a single dose of Antiminth (pyrantel pamoate) ORAL SUSPENSION

Highly effective against
nworm and roundworm

Non-staining to teeth
oral mucosa on ingestion, to
ools, clothing, linen

Simple dosage with a
ngle-dose regimen: 1 cc. per
-lb. body weight (1 tsp./50 lb.;
aximum dose, 4 tsp.)

Well-tolerated, based on clinical studies*

Pleasant-tasting, easy-to-take, caramel-flavored oral suspension

Economical, because one prescription can treat the entire family

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

ANTIMINTH®
(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.
ORAL SUSPENSION

While Antiminth is highly effective against pinworms and roundworms, the illustration is not meant to imply 100% efficacy.
*Data on file at Roerig.

Please see prescribing information on facing page.

Health Series Begins On Public TV

A series of five special medical documentaries is being aired over nine Alabama Public Broadcasting Service stations beginning November 24 and continuing through March 1974. These 90-minute programs, titled "The Killers," are designed to inform the public about methods of prevention, early detection and treatment of the five medical conditions that took 1.5 million lives and accounted for 75.7 per cent of the deaths in the United States last year. Included in the series will be discussion of heart disease, inborn genetic defects, pulmonary disease, trauma and cancer. The series will be viewed nationally through 237 PBS stations and is designed as a springboard for community educational activities regarding each disease.

Women In "Surgical Menopause" Less Likely To Get Breast Cancer

Studies of thousands of patient histories at Emory University indicate that women in "surgical menopause" resulting from hysterectomies and surgical removal of ovaries are less susceptible to breast cancer than women in natural menopause. Robert L. Egan, M. D., said this is an early finding in a research project aimed at discovering factors that put women into a high-risk category for breast cancer. His studies show that women in natural menopause are more than three times as likely to have breast cancer than women in surgical menopause. Dr. Egan is a professor of radiology in the Emory University School of Medicine and a widely known authority on the technique of mammography.

The Emory professor pointed out that age is definitely a factor in breast cancer. After 35, women are much more susceptible to the disease. His current study seeks to bring out other predisposing factors to the disease in order to give the medical profession a profile of the high-risk candidate.

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512

When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

lies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended.

Panalgesic©

RELIEVES PAIN

Usage: Apply where it hurts with gentle massage. May be repeated as often as necessary. A first aid in injuries, relieving pain and discouraging infection. Useful in industrial clinics—collegiate and professional athletic training programs.

**You may request a clinical supply.*

Dispensed in 4 oz. bottles, 6 oz. aerosol spray pint and half gallon bottles.

WILLIAM P. POYTHRESS & COMPANY, INC. RICHMOND, VIRGINIA 232

Rio Carnival—Beautiful, Exciting and A Memorable Experience For Members of MASA

When members of the Medical Association of Alabama and their families embark on the Rio Carnival they'll enjoy a memorable week of inspiring scenery, exciting entertainment and value-packed shopping.

The South American trip will depart January 18 from Birmingham, and features outstanding flight accommodations, a week-long stay at Rio's most futuristic hotel—the beautiful Nacional, and an endless series of unforgettable experiences.

Members of MASA will find that Rio's beautiful setting defies the adjectives of travel folders.

The lush green mountains which pitch steeply to the glittering water and the dozens of spectacular beaches are equalled only by the awe-inspiring view of the city at night from Sugar Loaf mountain, reported a recent Rio visitor. Sugar Loaf stands at the entrance to Rio's vast Guanabara Bay and provides a gorgeous sight of glittering lights reflected in the water and the huge 125-ft. illuminated statue of Christ spreading its arms above the city from the peak of Corcovado mountain. Both Corcovado and Sugar Loaf can be ascended via cable car and both have restaurants on their peaks.

MASA travelers will find their hotel, the newly built Nacional Rio, is set right on the ocean. It's a modern, comfortable and beautiful resort center boasting swimming pools, outstanding restaurants and lounges. The hotel also offers free transportation to and from Copacabana at the heart of the bustling, exciting and lively Rio downtown area.

Rio is both a vibrant and a sophisticated city. It boasts some of the wildest and most exotic nightclubs in the world as well as impressive cultural centers—there are 28 museums in the city. The samba, heard whenever and wherever one travels in the city, is the star of every show. This traditional Brazilian dance, in its countless variations, is earthy, energetic, even acrobatic.

A highlight of any trip to Rio is a cable car ride to the top of Sugar Loaf Mountain. Sugar Loaf stands at the entrance to Rio's Guanabara Bay and provides a majestic view of the city of Rio.

It is the people who make Rio such a hospitable, warm and friendly area. Shopping and dining is a memorable experience absent of price haggling or bargaining prevalent in other tourist areas. In Rio the tourist is truly a welcome guest treated with great dignity.

Rio is a perfect and unforgettable destination for the members of MASA and their families—truly South America's Festival City.

Dr. Robert Parker, Secretary of the Alabama Board of Medical Examiners, has announced an address change to P. O. Box 946, Montgomery, Alabama 36102. The board's offices are now located in the MASA Headquarters Building.

CONTINUING MEDICAL EDUCATION

The Physician's Recognition Award

Larry Dixon

The MASA Education Department has produced 21 hours of accredited continuing medical education since May of this year. These hours total slightly over one-third of the required Category One credit for the AMA's Physician's Recognition Award (PRA). Sixty hours per reporting period, is all that is necessary to comply with the most stringent PRA requirement. The remaining 90 hours can be obtained from numerous activities acceptable for credit in the other five categories. These activities range from teaching, publishing and individual CME activities to Category Six's "Other Meritorius Learning Experiences." The possibilities are so numerous as to validate the comment of Dr. C. A. Hoffman, Past President of the AMA, when he stated in reference to the PRA, "Most physicians find that the continuing medical education activities they carry out in meeting the demands of this profession will qualify them for the award."

With the award within the grasp of the majority of physicians in this state, why is it more Alabama physicians have not received it? The possible reasons may be as varied as the individuals practicing medicine are varied and dissimilar. However, a genuine lack of interest in obtaining it must be considered. Hopefully, this article can influence that particular situation by emphasizing certain aspects of the award in an attempt to make it more appealing.

The Education Department has received many questions concerning the basic particulars of the PRA. The following synopsis should explain some of the more frequent questions.

The award is sponsored and administered by the medical profession as an incentive to take part in a voluntary CME program. It is available to all physicians residing in the United States, regardless of AMA membership.

Reception of the award documents participation in a three-year CME program with but one final objective, the improvement of medical care. The award represents something doctors do to satisfy no one but themselves that they are wholly committed to providing the best patient care available.

The PRA can be acquired by obtaining 150 credit hours in six specific categories during a three-year cycle. Each category, except number one, has a limit; number one has a minimum. Category One: C. M. E. Activities With Accredited Sponsorship, 60 hours required. Category Two: C. M. E. Activities With Non-Accredited Sponsorship, 45 hour limit. Category Three: Medical Teaching, 45 hour limit. Category Four: Papers, Publications, Books and Exhibits, 40 hour limit. Category Five: Non-Supervised Individual C. M. E. Activities, 45 hour limit. Category Six: Other Meritorious Learning Experiences, 45 hour limit.

Hours are normally credited on a one-to-one basis. A scientific session sponsored by an accredited agency will have an equal number of credit hours and actual program hours. Teaching, publishing and individual activities all have established credit. An example of credit hours for publishing can be directly related to MASA's attempt to increase the number of scientific articles published in the *Journal of the Medical Association of the State of Alabama*. The physician can claim ten credit hours of Category Four credit upon publication of a scientific article submitted to the *Journal*.

Hopefully, the availability and mechanics of the award have been established, now for another attempt at establishing appeal. If the aforementioned personal gratification of being involved in a program designed to further the physician's competence isn't enough incentive, perhaps the stark realism of the approach of an ever increasing attempt to govern physician activities by nonphysicians will encourage participation in programs that document professionalism on a voluntary basis. There is a possibility of having much more than mandatory continuing medical education imposed upon the medical profession if an opening ever appears. What can be termed justification is not known at this time; however, a large percentage of physicians participating in an in-house program such as the AMA's Physician's Recognition Award certainly appears to be a logical activity.

Regardless of your motivation, should you as an Alabama physician wish to participate, contact the Department of Continuing Medical Education, American Medical Association, 535 North Dearborn Street, Chicago, Illinois, 60610. If you have further questions contact the MASA Education Department.

Health Care Legislation Introduced

A bill designed to improve availability of health care for rural Americans, particularly the poor, has been developed by the American Medical Association and introduced in Congress. The measure would authorize $300 million over three years for grants and loans to plan and develop health care delivery models. An Office of Rural Health would be set up in the Department of Health, Education and Welfare.

Is there a tablet containing *only* an expectorant and *only* Glyceryl Guaiacolate? YES!

HYTUSS TABS

(GLYCERYL GUAIACOLATE 100mg.)

1. Patient acceptable tablet dose.
2. Single entity expectorant.
3. Measured tablet dose.
4. Sugar-free tablet.

An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.

Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg. **Action and Use:** This preparation utilizes the effective expectorant action of glyceryl guaiacolate which significantly stimulates the secretion of respiratory tract fluid. The increased flow of less viscid fluid favors expectoration and has a demulcent effect on the tracheobronchial mucosa. The primary usefulness of Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore useful in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, influenza and the measles. The expectorant action of Hytuss may also provide symptomatic relief in some chronic respiratory disorders when the patient experiences spasms of dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** *Adults*—1 tablet four times daily. *Children*—6 to 12 years of age; ½ tablet 3 or 4 times daily. HOW SUPPLIED: White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. **Literature Available:** On request.

Available through all drug wholesalers.

Hyrex

HYREX COMPANY

832 South Cooper
Memphis, Tenn. 38104

around the state

Vital Statistics

NEW MEMBERS

Dallas County

Chittom, Park Thetford, b 42, mc Mississippi 68, recip. Mississippi 68, 509 Parkman, Selma, Alabama 36701. I.

Deavor, William Chester, b 39, mc Alabama 66, sb 67, P. O. Box 1429, Selma, Alabama 36701. ObG.

Houston County

Watson, William Grant, Jr., b 43, mc Alabama 68, sb 69, 509 West Main Street. Dothan, Alabama 36301. Pd.

Lauderdale County

Jeffres, Earl McIlwain, b 34, mc Alabama 61, sb 62, 220 West Tennessee Street, Florence, Alabama 35630. ObG.

Madison County

Rhyne, Joseph Adolphus, III, b 35, mc Loma Linda 62, recip. NBME 73, 930 Franklin Street, Huntsville, Alabama 35801. GP.

Mobile County

Davis, George Vestal, b 36, mc Baylor 64, recip. Texas 72, First Federal Towers Building, Suite 412, Mobile, Alabama 36608. P.

MEMBERS DECEASED

Blount County

Towns, Thomas Marvin, Oneonta, Alabama Deceased 8/31/73

Etowah County

Bobo, John Simeon, Gadsden, Alabama, Deceased

Jefferson County

Miller, James A., Midfield, Alabama, Deceased

Lawrence County

Taylor, Woodie R., Florence, Alabama, Deceased 9/2/73

Lee County

Brown, Morgan Witherhill, Auburn, Alabama, Deceased

CHANGES OF ADDRESS

Colbert County

Bowen, Robert Klien, Jr., present Sheffield to Shoals Medical Building, Sheffield, Alabama 35660.

Jefferson County

Chastain, Truman Leroy, present Birmingham to P. O. Box 26360, Birmingham, Alabama 35226.

McGowan, Eoline Irene, present Birmingham to P. O. Box 1103, Birmingham, Alabama 35202.

Pitts, James Randall, Birmingham, Alabama to 3183 River Oak Road, Augusta, Georgia 30904.

Register, Harry Buford, Jr., present Birmingham to 3401 Montgomery Highway, Birmingham, Alabama 35209.

Schencker, Bernard, Birmingham to Lloyd Noland Hospital, P. O. Box 538, Fairfield, Alabama 35064.

(Continued on Page 395)

Blue Cross wants to make filing claims easy for you. That's why we have professional relations people like Steve Harrington.

Steve and the six other professional relations people throughout Alabama are trained to help you with difficult claims. And they're qualified to answer any questions you have.

Our professional relations people are professionals themselves. They're specialists. Working with you is their only job. They're all experienced in claims work. And they're all good at what they do.

So the next time you run into a sticky claim, call Blue Cross and ask for the professional relations person in your area. He's around to make your life a little less complicated.

Blue Cross
Blue Shield
of Alabama

Pinworm therapy is often a family affair

Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness and headache have occurred. Rarely, tinnitus, hyperirritability numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopen malodor of the urine, crystalluria, hematuria; appearance of li Ascaris in the mouth and nose. Hypersensitivity reactions

Chewable Tablets 500 mg

Mintezol®

HIABENDAZOLE | MSD)

easy to take
eryone in the family
n keep to the
gimen you prescribe

de: fever, facial flush, chills, conjunctival injection, edema, anaphylaxis, skin rashes, erythema multiforme ding Stevens-Johnson syndrome), and lymphadenopathy.

ied: Chewable tablets, containing 500 mg thiabendazole, kes of 36, strip packaged, individually foil wrapped; ension, containing 500 mg thiabendazole per 5 ml, in s of 120 ml.

ore detailed information, consult your MSD representa- see full prescribing information. Merck Sharp & e, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.

The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).

MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.

The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

HERE Pleural effusion

Wherever it hurts, Empirin Compound with Codeine usually provides the relief needed.

HERE Biliary calculi

In general, only pain so severe that it requires morphine is beyond the scope of Empirin Compound with Codeine.

prescribing convenience: up to 5 refills in 6 months, at your discretion (unless restricted by state law); by telephone order in many states.

Empirin Compound with Codeine **No. 3,** codeine phosphate* 32.4 mg. (gr. ½); **No. 4,** codeine phosphate* 64.8 mg. (gr. 1).*Warning—may be habit-forming. Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

WHEREVER IT HURTS

EMPIRIN COMPOUND c̄ CODEINE

#3, codeine phosphate* (32.4 mg.) gr. ½
#4, codeine phosphate* (64.8 mg.) gr. 1

Editorial COMMENT

PSRO

The crisis issue of this moment is Professional Standard Review Organizations (PSRO). Upon this thorny problem physicians across the land will find themselves arrayed one against the other, county against county, state against state, and specialty against specialty.

From a meek acquiescence to Public Law 92-603 which decreed that criteria shall be established for hospital admission and treatment of all patients whose bill will be paid in whole or in part by the Federal government, there is now emerging downright rebellion to this limitation on medical practice. Echoes of the early sixties when medicare was moving toward reality are heard today in almost the same furious proportion.

Opposition to PSRO is taking many forms: physicians in some states are demanding outright repeal of Public Law 92-603; in other states medical organizations have adopted a hard-nosed, hands off policy.

Here in Alabama a corporation has been formed to contract for and direct the PSRO program on a state wide basis. All practitioners of medicine, including osteopaths, are automatically members of this corporation. Under the law, no dues can be charged or any other restrictions established to prevent a medical practitioner to belong or share in whatever benefits may be derived to the corporation.

The corporation is designed to contract with the federal government to establish and administer the PSRO program, most likely through geographic subdivisions. The responsibility for establishing criteria for hospital admissions and treatment will be delegated to the several specialty organizations.

This is somewhat the same approach taken by all other states and subdivisions of the more popular states although the names of the contracting agencies may differ.

To state that all Alabama physicians agree wholeheartedly with the concept of PSRO is to ignore the facts, but as of this writing the level of dissent is no more than a faint rumble.

A most astute observer of the Washington scene who has spent almost a lifetime representing Medicine's causes on Capitol Hill has expressed deep concern that physicians may "strain at a gnat and swallow a camel" in making an all-out fight against PSRO when the real gut issue of this era in history is national health insurance.

Some of Medicine's stoutest supporters in the national Congress have stated flatly their support for the PSRO concept. With this in mind there appears little reason to believe that repeal of the law is possible.

Also, if we would but pause and remember the exhausted state which organized medicine found itself in following that long, bitter and unsuccessful fight against Medicare, one can only conclude that we have neither the physical nor numerical strength to do battle against both PSRO and national health insurance in the relative short span of time which these issues will be considered by Congress.

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Headaches Treated By Anterior Scalenotomy

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One of the most perplexing problems in clinical medicine, is the patient with severe, intractable, recurrent, chronic headaches which do not respond to simple therapeutic measures. After appropriate evaluation, we are frequently left with patients in whom there is no proven mass lesion or other organic disease and who also do not readily conform to the classical description of tension or migraine headaches.

It has been recognized for some time that occipital headaches can be related to problems in the neck including cervical strains, cervical arthritis, cervical rib syndrome and secondary scalenus anticus syndromes.[1] Sustained muscle contraction in the neck frequently contributes a component of pain to headaches due to various causes and is the primary source of many headaches associated with tension states.[2] Several years ago, one of the authors was involved in extensive studies of 40 patients with classical scalenus anticus syndrome.[3] A high percentage of these postoperative patients expressed their gratitude for the relief of headaches that had been intractable and frequently diagnosed as migraine or tension. Often, there appeared to be symptoms due to irritation of the upper cervical nerve roots manifest by suboccipital pain, pain in the region of the trapezius muscle, most marked at the medial superior scapular border, supraspinatus pain, and subdeltoid pain. Occipital headaches have previously been reported as a result of irritation of the upper cervical nerves.[4]

The greater occipital nerves originate from the posterior division of the second cervical nerve root. The nerves pass backward between the atlas and axis; then pass between the inferior capitus oblique and the semispinatus capitus muscle and finally penetrate the semispinalis capitus and emerge into the occipital area near the lateral border of the insertion of the trapezius muscle. The greater occipital nerves are the largest purely sensory nerves in the body. The tortuous course in the neck and superficial position over the bony prominence of the occiput, subjects the greater occipital nerves to trauma, either direct or from cervical strain and muscle spasm. The spinal nucleus of the fifth cranial nerve descends in the substantia gelatinosa to the level of C_2. Thus, painful stimuli, entering the spinal cord at the second cervical level, can result in referred subjective pain in the area of distribution of the ophthalmic division of the fifth cranial nerve. Therefore, occipital neuralgia can and frequently does, result in hemicrania. Severe pain in this area may be associated with nausea and vomiting. The combination of hemicrania and vomiting may lead to an erroneous diagnosis of migraine headache.[5]

A study was undertaken to evaluate the affect of anterior scalenotomy on occipital neuralgia. A rather clear cut syndrome has

emerged from these studies. The problem appears to be predominantly one of women; the youngest patient being 18 years of age, the oldest being 66 years of age. (Tables II, III). These patients complained of severe headaches originating in the neck posteriorly and radiating through the side of the head to the retroorbital and supraorbital area of the affected side. 50 per cent have had bilateral headaches. The headaches have been of varying degrees and duration. Some have been almost continuous for weeks, in spite of intermittent relief by large doses of opiates. Others have been intermittent but have lasted from several days to several weeks over a period of many years. There is frequently associated nausea and vomiting with severe pain. The pain frequently occurs at night and is apparently not usually related to physical activities. There is associated discomfort in the posterior neck and the supraspinatus region with varying radiation of pain into the upper extremities. The upper extremities symptoms frequently include a deep, aching pain in the arm to the elbow and intermittent paresthesia and numbness of the hand. The arm and hand symptoms appear to be affected by physical activities, particularly activities involving use of the hand above the head and with the frequent, specific complaint of inability to roll their hair, hang out clothes, or work on kitchen shelves because of numbness, paresthesias and pain. Another specific complaint is the "tired arm syndrome."

Physical examination reveals a tenderness over the greater occipital nerve at its point of emergence at the lateral border of the upper attachment of the trapezius muscle, on the affected side. There is usually marked tenderness in this area and frequently palpation of the nerve results in pain radiating through the side of the head to the retroorbital area. The scalene muscle is tender to deep palpation and appears more prominent than on the unaffected side. Pressure over the scalenus anticus muscle in the supraclavicular space may result in radiation of pain along the course of the occipital nerve or sometimes to other areas of the shoulder girdle. These physical findings are directly related to the severity of the subjective pain. These findings may be minimal or absent during periods of remission from the headache. We have found very little correlation between the various stretch tests (Adson's, Allen's etc.) and this syndrome.

Occipital nerve block with 1 per cent Lidocaine is routinely done as a diagnostic test and is rather dramatic. The occipital and nuchal pain is relieved within a short period, often within one minute or less. The frontal headaches usually disappear within 5 to 10 minutes. Associated with subjective relief of symptoms, there is objective decrease in the scalenus anticus muscle spasm and tenderness. The duration of the occipital nerve block varies from one hour to several months. Most patients however, have recurrent symptoms within one or two weeks. In patients who have received prolonged relief following a diagnostic block, additional therapeutic blocks have been done with 1 per cent Lidocaine. Therapeutic blocks have not been enhanced by the addition of steroids which therefore are no longer employed. A high incidence of emotional and psychiatric factors have been noted in these patients. It is possible that increased muscle tone, associated with emotional stress, could precipitate this type of "tension headache" but it would appear more likely that the psychogenic overlay is secondary to this severe, recurring, incapacitating pain syndrome.

Patients have been accepted for surgery who have had severe, intractable headaches which could not be managed medically. Medical management has included tranquilizers, analgesics, therapeutic nerve blocks, psychiatric interviews and physiotherapy. The use of cervical collars, neck traction, and local heat has not been effective in our hands.

This study has been in progress for 8 years and a total of 285 patients have been operated upon. 258 of these patients have been followed for over six months and are

tabulated in (Table III). 50 per cent of these patients have had bilateral scalenotomies, done either as one procedure or for recurrent headaches on the opposite side following a one-side scalenotomy. Surgical results are presented in (Table I). The patient is considered as having an excellent result if there were no further headaches. A good result was interpreted if the patient continues to have occasional headaches which are relieved by aspirin or similar mild analgesics. The poor results included patients who obtained no relief or who required additional surgery for relief of symptoms, such as occipital neurectomy. The indications for neurectomy and results will be presented in a future paper.

Results of this study demonstrate a relationship between scalenus anticus muscle spasm and occipital neuralgia. The exact mechanism of this is rather conjectural. It would appear from this study that fibers of origin of the scalenus anticus muscle compress or irritate the nerve roots of the cervical nerves and initiate reflex spasm of the suboccipital muscles. The posterior rami of the cervical nerves, which are motor to the nerves of the posterior neck, may be irritated in this manner and thus account for irritation of the greater occipital nerve which passes in a rather tortuous course through these muscles. It is felt that, like a bow string, relief of tension at the lower end of the anterior scalene muscle results in relief of tension at the upper end of the muscle.

SUMMARY

During the past 8 years, anterior scalenotomies have been done for headaches on 258 patients with 82 per cent good-to-excellent results. The mechanism appears to involve release of nerve root pressure at the upper end of the scalenus anticus muscle by transsection of the lower end of the muscle. The indication for surgery is based upon history and physical findings, and results of diagnostic occipital nerve blocks. Prompt relief of headaches and tenderness of the anterior scalene muscle by occipital nerve block is presently considered adequate indication for surgery in intractable occipital neuralgia.

REFERENCES

1. Little, Samuel C.: Headaches Associated with Injuries of the Cervical Spine. The Journal of the Medical Association (Alabama). (Sept.) 1946.

2. Knight, Geoffrey: Post Traumatic Occipital Headaches. J Lancet (Jan. 5) 1963.

3. Cox, Charles L.: Neurovascular Compression Syndrome of the Upper Extremity. The Journal of the Medical Association (Alabama). (April) 1966.

4. Stowell, Averill: Diagnosis and Treatment of Neck-Shoulder-Arm Syndromes with Medicolegal Considerations. The American Surgeon 25:1, (Jan.) 1959.

5. Jones, Robert R: Diagnostic and Therapeutic Blocks of Occipital Nerves for Occipital Headaches. J Lancet 83:234, (July) 1963.

TABLE 1

Result of Surgery

Result	Number	Percent
Excellent	84	32.5
Good	131	50.8
Poor	43	16.7
Total	258	100

TABLE 2

Sex Incidence

Sex	Number	Percent
Female	209	79.3
Male	49	20.7
Total	258	100.00

TABLE 3

Age Distribution

Age	Number	Percent
21 - 30	71	27.5
31 - 40	73	28.3
41 - 50	83	32.2
51 - 60	23	8.9
61 - 70	8	3.1
Total	258	100.0

Delayed Rupture of The Spleen

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The incidence of splenic rupture is increasing. This increasing incidence of injury to the spleen is probably due to the increased number of moving vehicle accidents. However, many times the injury may be so slight that it is not noted by the patient.[1] Spontaneous splenic ruptures may also occur, but it is more likely that these result from minimal trauma such as coughing, vomiting or vigorous exercise.[4]

Of all patients requiring surgery for nonpenetrating injuries of the abdomen, 20 per cent have damage to the spleen.[9] In Upadhyaya and Simpson's series of children with blunt abdominal trauma, 32.5 per cent had traumatic splenic rupture.

Perhaps the most dangerous form of splenic injury is the so-called "delayed rupture".[1] The high mortality reported in delayed splenic rupture is primarily due to failure to consider the diagnosis since the clinical picture develops several days after minimal trauma which the patient may not even remember. This diagnosis should be considered whenever a patient presents with unexplained shock and any history of trauma, no matter how trivial. Seventy-five per cent of the delayed ruptures of the spleen are manifest within two weeks. Delayed rupture of the spleen is generally considered to comprise approximately 10 to 15 per cent of the cases of splenic trauma.[1]

With injury to the spleen, a patient may have rapid exsanguinating hemorrhage, but temporary hemostasis may occur subsequent to the hypotension and tamponade of the laceration of the splenic capsule by blood clot, omentum or adjacent organs. Subsequent hemorrhage may occur within a few hours or may be delayed for days. This intervening period is generally designated the "latent period". If the latent period is greater than 48 hours from the time of the initial injury, this phenomenon is termed "delayed rupture" of the spleen.[9]

Recent interest at the Lloyd Noland Hospital and Clinics in "delayed rupture" of the spleen was stimulated by the presentation of two such patients within the past six months. A review of our patients from February 1, 1963, to February 1, 1973, revealed that we had done 33 splenectomies for trauma, exclusive of iatrogenic trauma, of which five presented as delayed ruptures (15.1 per cent).

CASE REPORTS

P. H., a 41-year old white male fell on January 19, 1973, fracturing his left tenth rib. He was treated symptomatically in the emergency room and did well until January 24, 1973, when he began to feel weak and faint. He returned to the emergency room in shock without an obtainable blood pressure, his hemoglobin was 12.6 and his WBC was 17,600. At laparotomy, his abdomen was filled with blood and a ruptured spleen was found and removed. He convalesced without incident.

S. W., a 48-year old white male was involved in an automobile accident on September 11, 1968. In the emergency room he had diffuse abdominal tenderness and his white blood cell count was 13,600, subsequently rising to 16,700 on the 13 of September, when he became diaphoretic and developed severe abdominal pain. His blood pressure was 98/70 and pulse rate 126. At laparotomy, his abdomen was filled with bright red blood and his spleen was frag-

mented. Splenectomy was performed. This patient's recovery was complicated by a wound dehiscence.

J. C., a 43-year old white male was involved in an automobile accident one week prior to admission to Lloyd Noland Hospital. Throughout the week he had continuous mild abdominal pain but was otherwise asymptomatic. There was a palpable left upper quadrant mass. His hemoglobin on admission was 9.0 grams per cent and white blood cell count was 5.400. At laparotomy, the patient was noted to have clotted blood in the left upper quadrant and the spleen was enlarged with a tear in its capsule. After splenectomy, his convalescence was uneventful.

A. M., a 32-year old white female was re-admitted four days after discharge from the medical service where she had been treated for influenza. The syndrome had been associated with severe coughing which had abated at the time of discharge. Three days following discharge, the patient developed severe left upper abdominal pain. On return to the hospital, her blood pressure was 100/70, pulse 100 and she exhibited marked left upper quadrant tenderness and guarding. The white blood count was 10,800. At laparotomy, the patient had a large subcapsular hematoma with free blood in the peritoneum. Her postoperative convalescence after splenectomy was without incident.

J. P., a 41-year old white female underwent a vaginal hysterectomy on August 3, 1972. Late in the afternoon, on the day of surgery, she suffered a cardiopulmonary arrest and cardiopulmonary resuscitation was accomplished. On August 10, 1972, the patient's blood pressure dropped to 80/60 and her white blood count was reported as 13,800. Her abdomen became distended and laparotomy was advised and performed. She had a ruptured spleen with clotted blood in the left upper quadrant as well as a pelvic abscess. Splenectomy and drainage of the pelvic abscess was performed. She had a stormy postoperative course requiring a tracheostomy. She also developed intestinal obstruction which cleared with conservative therapy.

Except for the prolonged "latent period", the symptoms and signs of delayed rupture of the spleen are the same as those of acute rupture. These signs and symptoms generally fall into two categories—systemic symptoms of acute hemorrhage and/or local symptoms of peritoneal irritation.[9] The presenting clinical picture may vary from a moribund to an almost asymptomatic state. The typical patient presents with generalized abdominal pain, nausea and vomiting. Only about one-third localize their pain to the left upper quadrant. It is reported that 75 per cent have left shoulder pain. Examination usually reveal left upper quadrant guarding and rebound tenderness. The rebound phenomenon may be more prominent than direct tenderness due to the extreme peritoneal irritation from blood in the peritoneal cavity.[1] Most adult patients present with signs of hypovolemia but in one series of 52 children with splenic rupture, not one case with isolated splenic injury had signs of hypovolemia.[1] There may be an area of fixed dullness to percussion in the left upper quadrant or flank indicating a large extracapsular or subscapsular hematoma (Ballance's sign). This fixed dullness is more significant if the patient has shifting dullness in the right flank indicating free blood in the peritoneal cavity. This finding, associated with local injury to the splenic area with internal hemorrhage, is said to be pathonomonic of splenic injury.[9]

Another sign reportedly occurring in approximately 75 per cent of cases of ruptured spleen is persistent left shoulder pain (Kehr's sign). Putting the patient in moderate Trendelenburg position may be required to elicit this finding.[9]

Occasionally, Saegesser's sign may be demonstrated by pressure over the phrenic nerve approximately one inch above the clavicle between the sternocleidomastoid and scalenus anticus muscles. Saegesser's sign

is positive if pain is caused in the left neck but not the right in the patient with ruptured spleen.[9]

A four quadrant abdominal paracentesis, intermittent aspiration or peritoneal lavage with saline may be diagnostic in the patient with splenic injury. A negative aspiration is of no value in ruling out free blood in the peritoneal cavity but a positive tap may be extremely helpful. Abdominal paracentesis probably should be avoided when a patient has had previous abdominal surgery with the possibility of adhesions or if the patient is distended.

Laboratory data may be helpful in establishing the diagnosis. The hematocrit may be low, but if bleeding is rapid, the hematocrit may be normal. Frequently there is a rapid rise of the white blood cell count to around 20,000 cells per cubic millemeter with a marked left shift. Plain abdominal x-rays are usually unremarkable but absence of the left psoas shadow and kidney shadow may indicate splenic injury with free peritoneal blood. Occasionally, the splenic flexure of the colon may be displaced inferiorly and the stomach may be displaced medially and inferiorly. A chest film should be routinely obtained to rule out intrathoracic injury.

If difficulties are encountered with clinical diagnosis, then aortography or selective arteriography may be done. This can be accomplished simply by the retrograde femoral route and with minimal risk. Thompson, et al, pointed out that their criteria of diagnosis of splenic rupture by arteriography are: (I) splenic displacement; (II) intraparenchymal extravasation of contrast media; (III) displacement or separation of intrasplenic vessels; and (IV) defects in the splenogram.[10]

Liver and spleen scans may contribute to the diagnosis. Areas of hemorrhage and compression appear as hypo-functioning areas. The subcapsular hematoma will always appear larger for the area of hypofunction is greater than the size of the hematoma because of the surrounding compressed parenchyma. Scanning also may reveal unexpected injuries to the liver.[9]

The spleen should be removed for any injury with or without capsular tear although occasional reports of spontaneous healing of splenic injuries appear. Increased susceptability to sepsis, particularly in children, and thromboembolic phenomenon have been reported after splenectomy but the incidence of these complications does not contraindicate splenectomy for splenic injury.[9] A careful exploration of all abdominal organs should be performed because approximately one-third of patients will have associated injuries. Operative mortality with isolated splenic injuries is generally less than one per cent. In the presence of associated injuries, the operative mortality rate may approach ten per cent.[9] The operative mortality reported by Zabinski and Harkins was 14.5 per cent in 62 patients with delayed rupture.[12] In our series of five delayed ruptures of spleen at the Lloyd Noland Hospital and Clinics, there were no significant associated injuries and no operative mortality. Our overall operative mortality from traumatic splenic rupture was six of 33 or 18.1 per cent. Eighteen cases of isolated splenic injury were encountered and there was no mortality in this group. Fifteen patients had associated injuries and six died, giving an operative mortality rate of 40 per cent. The associated injuries were severe. One patient had a gunshot wound through a kidney; a second had a cerebral contusion, multiple fractures and a liver laceration; a third had bilateral amputations of the lower extremities, no left kidney function and suffered cardiac arrest in the operating room; the fourth had a cord transection; two had multiple intraabdominal organ injuries. The most important factor influencing mortality is associated injuries. The time from injury to treatment seems to have little effect on mortality.[6]

(Continued on Page 395)

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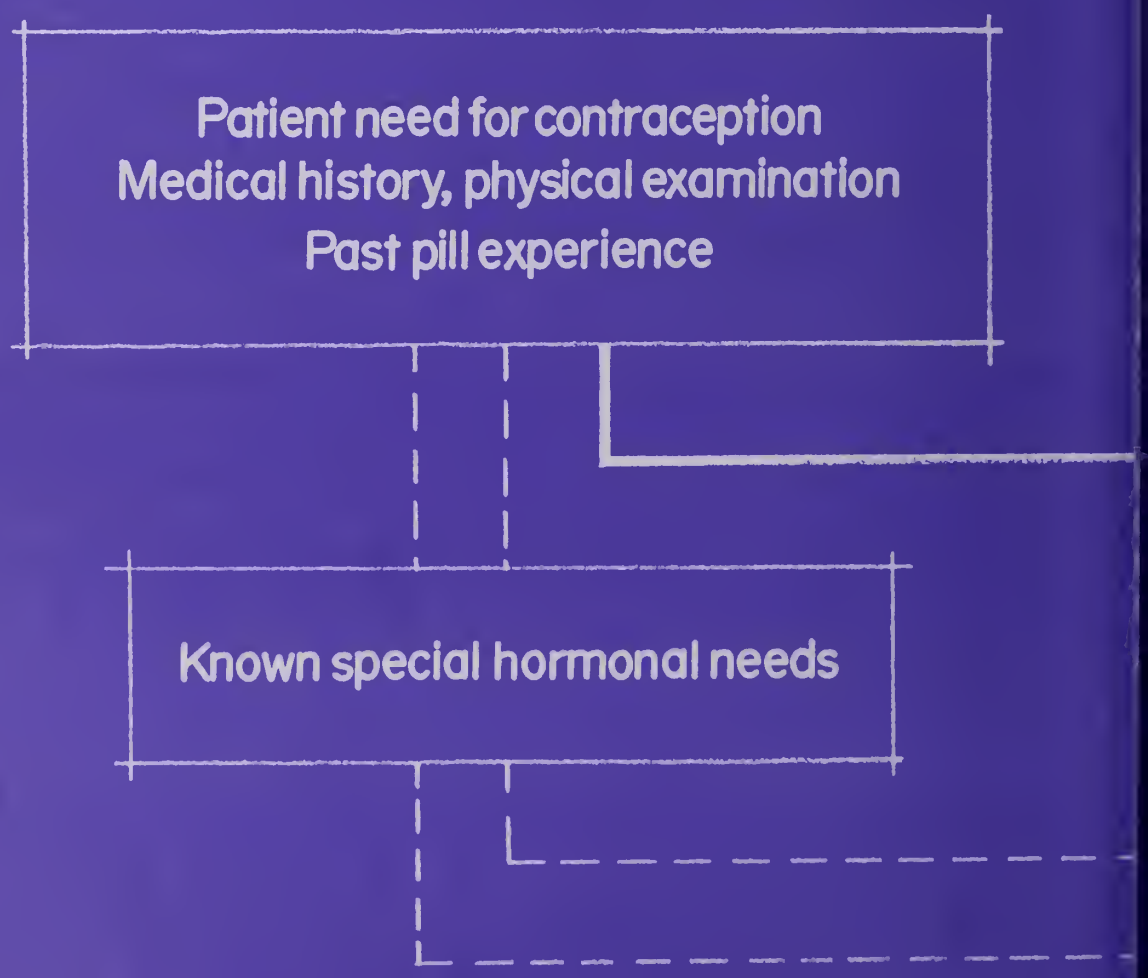

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An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in the United States. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this fa such as epilepsy, migraine, asthma, cardiac or renal dysfunc require careful observation. In breakthrough bleeding, and i cases of irregular bleeding per vaginam, nonfunctional ca should be borne in mind. In undiagnosed bleeding per vagi adequate diagnostic measures are indicated. Patients with a tory of psychic depression should be carefully observed anc drug discontinued if the depression recurs to a serious degree. possible influence of prolonged Ovulen or Demulen therapy on itary, ovarian, adrenal, hepatic or uterine function awaits fu study. A decrease in glucose tolerance has been observed in a nificant percentage of patients on oral contraceptives. The m anism of this decrease is obscure. For this reason, diabetic pati should be carefully observed while receiving Ovulen or Dem therapy. The age of the patient constitutes no absolute limiting tor, although treatment with Ovulen or Demulen may mask onset of the climacteric. The pathologist should be advise Ovulen or Demulen therapy when relevant specimens are sub ted. Susceptible women may experience an increase in blood sure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contra tives—A statistically significant association has been demonstr between use of oral contraceptives and the following serious verse reactions: thrombophlebitis, pulmonary embolism and bral thrombosis.

Although available evidence is suggestive of an association, a relationship has been neither confirmed nor refuted for the lowing serious adverse reactions: neuro-ocular lesions, e.g., re thrombosis and optic neuritis.

The following adverse reactions are known to occur in pati receiving oral contraceptives: nausea, vomiting, gastrointes symptoms (such as abdominal cramps and bloating), breakthro bleeding, spotting, change in menstrual flow, amenorrhea du and after treatment, edema, chloasma or melasma, breast cha (tenderness, enlargement and secretion), change in weight crease or decrease), changes in cervical erosion and cervical se tions, suppression of lactation when given immediately post par cholestatic jaundice, migraine, rash (allergic), rise in blood sure in susceptible individuals and mental depression.

Although the following adverse reactions have been reporte users of oral contraceptives, an association has been neither firmed nor refuted: anovulation post treatment, premenstrual syndrome, changes in libido, changes in appetite, cystitis-like drome, headache, nervousness, dizziness, fatigue, backache, sutism, loss of scalp hair, erythema multiforme, erythema nodos hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of contraceptives: hepatic function: increased sulfobromophthalei tention and other tests; coagulation tests: increase in prothrom Factors VII, VIII, IX and X; thyroid function: increase in PBI butanol extractable protein bound iodine, and decrease in T3 take values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral traception and Thrombo-Embolic Disease, J. Coll. Gen. P *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P. vestigation of Deaths from Pulmonary, Coronary, and Cere Thrombosis and Embolism in Women of Child-Bearing Age, Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll Investigation of Relation Between Use of Oral Contraceptives Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Gre G. R., and Smith, H. E.: Thromboembolism and Oral Contra tives: An Epidemiologic Case-Control Study, Amer. J. Epic *90*:365-380 (Nov.) 1969.

SEARLE Products of **Searle & Co.**
San Juan, Puerto Rico 00936

Enovid-E® **Now available in the 21-pill schedule in refillable Compack® and three-cycle Triopak™**
Each tablet contains: norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the put of gonadotropins from the pituitary gland. Enovid-E depre the output of both the follicle-stimulating hormone (FSH) and luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions Adverse Reactions* listed above for Ovulen and Demulen are a cable to Enovid-E and should be observed when prescribing Enov

Enovid-E®
brand of norethynodrel with mestranol

SEARLE Product of **Searle Laboratories**
Division of G. D. Searle & Co.
Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

(Continued from Page 390)

SUMMARY

During the period from February 1, 1963, to February 1, 1973, 33 splenectomies were performed at Lloyd Noland Hospital and Clinics for traumatic injury. Of these, five patients manifested delayed rupture of the spleen more than 48 hours post-injury. This represented a 15.1 per cent incidence of delayed rupture in this series. There was no operative mortality among the patients with delayed rupture. Five case reports are presented.

REFERENCES

1. Ballinger, Walter F. II.: Principles of Surgery. The Blakeston Division. McGraw-Hill Book Company, 1139-1153.

2. Badon, George R., and Verzosa, Edwards S.: Incidental Splenic Injury, Is Splenectomy Always Necessary? Amer. J. of Surg., 113:303-304, Feb. 1967.

3. Dropanar, Theodore, et al: The Syndrome of Occult Rupture of the Spleen. Arch. of Surg., 99:298-306, Sept. 1969.

4. Foley, William J., et al: Occult Rupture of the Spleen. Surg. Gyn & Ob., 128:1215-1220, June 1969.

5. Khanna, H. L.: Delayed Rupture of the Spleen. Am. Surg., 165:477-480, March 1967.

6. Lieberman, Robert C., and Welch, C. Stuart: A Study of 248 Instances of Traumatic Rupture of the Spleen. SGO, 127:961-965, Nov. 1968.

7. McKinnon, William: American Surgeon, Vol. 39: No. 1, 72-74, Feb. 1973.

8. Prager, David; Morel, Donald, and Dex, Walter: The Syndrome of Chronic, Occult Rupture of the Spleen. JAMA, 218:1824-1825, Dec. 20, 1971.

9. Rosoff, Leonard, et al: Injuries of the Spleen. The Surgical Clinics of North America, 52:3, 667-685, June 1972.

10. Thompson, Dennis P., et al: Celiac Angiography in the Management of Splenic Trauma. Arch. of Surg., 99:494-497, Oct. 1969.

11. Upadhyaya, P., and Simpson, J. S.: Splenic Trauma in Children. SGO, 126:781-790, April 1968.

12. Zabinski, E. J., and Harkins, H. N.: Arch. Surg., 46:186, 1943.

(Continued from Page 378)

Tiller, Mary John Brown, present Birmingham to P. O. Box 2646, Birmingham, Alabama 35202.

Tully, Albert Julian, Jr., present Birmingham to 1000 South 14th Street, Birmingham, Alabama 35205.

Waldo, Frank Bell, present Birmingham to 3401 Montgomery Highway, Birmingham, Alabama 35209.

Lauderdale County

Heslington, Hurston Farrar, present Florence to Route 7, Florence, Alabama 35630.

Lee County

Chase, Thomas Metcalf, Auburn to Medical Arts Center, Opelika, Alabama 36801.

Madison County

Lienke, Roger Irving, present Huntsville to Medical Arts Building, Anniston, Alabama 36201.

Marengo County

Perret, Norbert Earl, Jr., present Demopolis to P. O. Box 935, Demopolis, Alabama 36732.

Montgomery County

Averrett, Margaret Elizabeth, present Tuskegee to 113 East Spring Street, Tuskegee, Alabama 36083.

Cook, Ottis Deroy, present Montgomery to 707 Union Bank Building, Montgomery, Alabama 36104.

Sheehan, Lucius Clyde, Jr., present Montgomery to 1722 Pine Street, Suite 505, Montgomery, Alabama 36106.

Walker County

Emondson, Marshall Gray, present Jasper to 1105 7th Avenue, Jasper, Alabama 35501.

NEW TELEPHONE NUMBERS

Chittom, Park T., Dallas 874-9064

Davis, George V., Mobile 476-3166

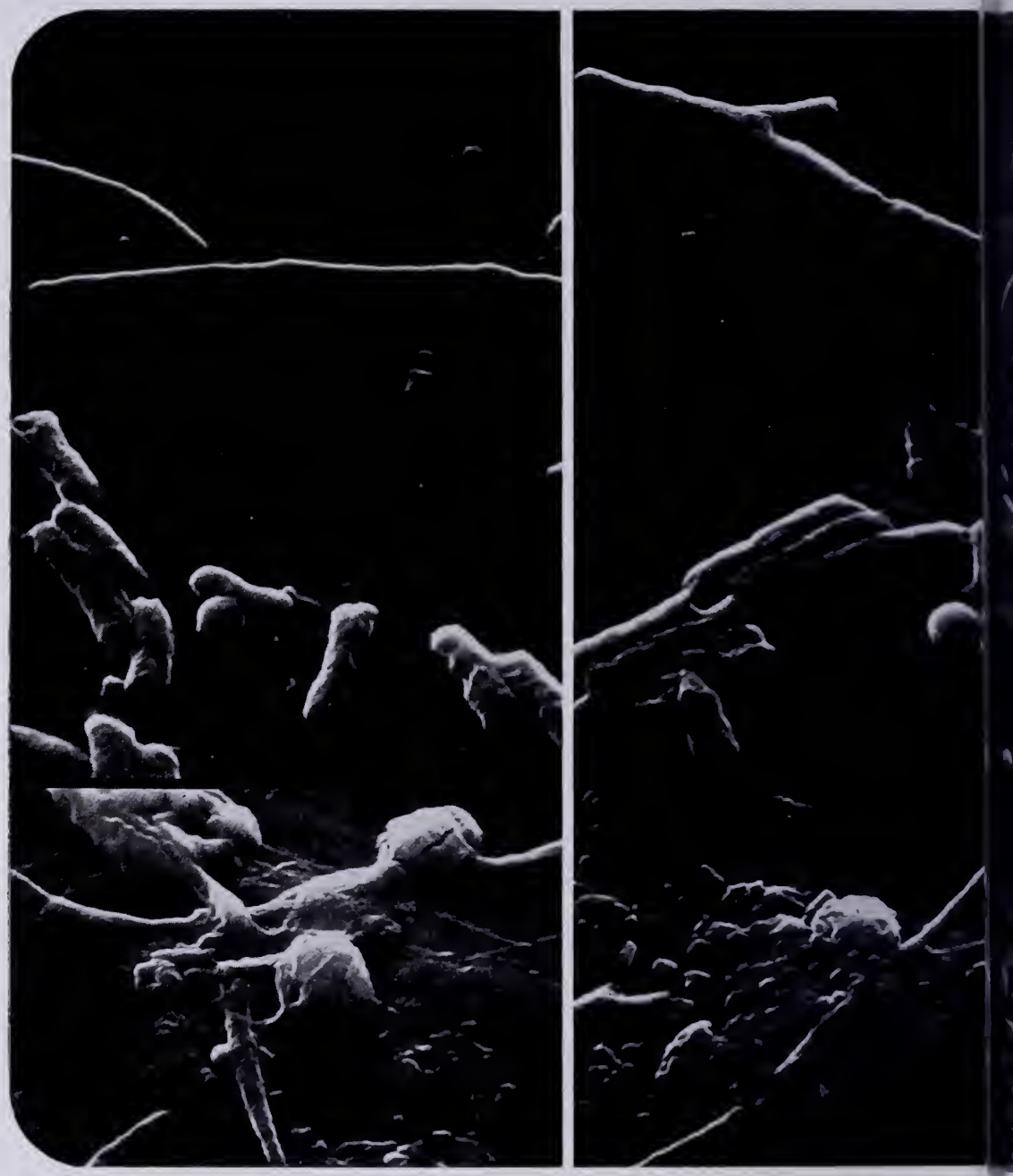
(Continued on Page 410)

Gantanol® (sulfamethoxazole) and th

0.1 M.I.C. for three hours
Similar elongations occur regardless of antibacterial used.

1.0 M.I.C. for three hours
Similar midcell defects seen with increased antibacterial concentrations.

10 M.I.C. for three hours
Similar spheroplast-like forms appear with high concentrations of the antibacterials.



E. coli + sulfamethoxazole

E. coli + tetracycline

The Scanning Electron Microscope (SEM) reveals the effe

The *in vitro* experiment. These SEM photomicrographs were taken as part of a study exploring the effects of various antibacterials with different modes of action on the surface morphology of bacteria. The scanning electron microscope was used because of its ability to show three-dimensional views of organisms, enabling better definition and appreciation of surface morphology.

For this portion of the experiment, *E. coli* were exposed to the following agents: sulfamethoxazole, a chemical drug which acts by interference with para-aminobenzoic acid utilization; tetracycline, which feres with intracellular protein synthesis; and ceph lothin and ampicillin, which are cell-wall-active dr

Strains of *E. coli*, each susceptible to the respect antibacterials, were exposed for 15, 30, 60, 120 an 180 minutes and 18 hours to several concentration of each agent.

Following the 180-minute or three-hour exposu to the antibacterials at 0.1 M.I.C., 1.0 M.I.C. and 10 M.I.C., photoscans of the *E. coli* were taken. As shown above, regardless of the antibacterial agent used or its mode of action, the changes in surface morphology were remarkably similar... elongatio at low drug concentrations, midcell defects at high

hree-Dimensional World of SEM

E. coli + cephalothin

E. coli + ampicillin

ertain antibacterials on bacterial surface morphology

:ntrations and ultimate progression to sphero-like forms.[1]

e interpretation. "At present, the significance of observations in clinical infection must be con-d with caution, but it is hoped that these data timulate a reevaluation of present concepts of ature and role of morphological variants of bac-xposed to a variety of antibacterial factors."[2]

hould be noted that this information represents *n vitro* research. No clinical significance can awn from this study concerning the effective-ness of any of the agents discussed, as it is not possible to extrapolate *in vitro* data to humans. This information is presented to demonstrate the continuing research activities in the area of antibacterials, particularly modes of action and surface morphology.

[1]Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

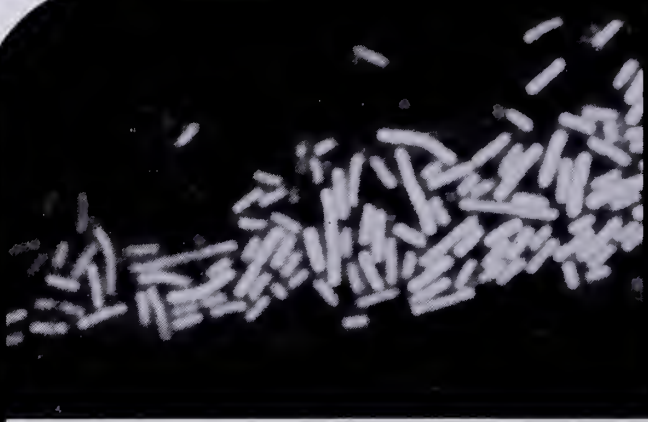
[2]*Antimicrob. Agents Chemother., 1*:164, 1972.

See next two pages for product information.

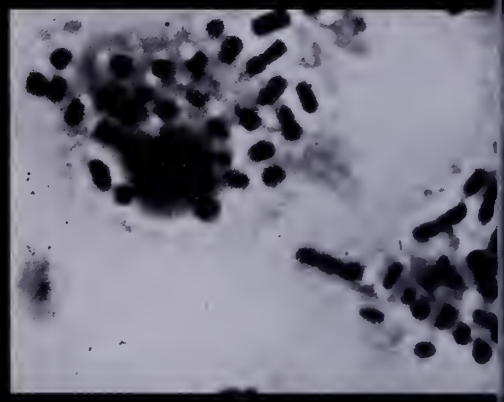
ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

Observations fro



E. coli—Fluorescent stain



Klebsiella sp.—Stain to define capsular enve

■ **Effective control of primary susceptible bacterial offenders**

Gantanol® (sulfamethoxazole) is effective against susceptible strains of *E. coli,* the most com cause of urinary tract infections. It is also highly effective against other susceptible gram-neg and gram-positive organisms, usually *Klebsiella-Aerobacter, Staph. aureus* and *Proteus mira*

■ **Prompt antibacterial blood and urine levels—in from 2 to 3 hours**

Antibacterial levels of Gantanol usually appear in blood and urine in from 2 to 3 hours after th initial 2-Gm adult dose. This rapid initiation of effective antibacterial activity enables prompt ment of certain nonobstructed urinary tract infections and may also help avert possible sequel.

■ **Around-the-clock coverage for 14 days**

Mounting evidence in current medical literature suggests a minimum of 14 days' continuous therapy for certain urinary tract infections.* Following the initial 2-Gm adult dosage of Gan each 1-Gm dose provides up to 12 hours of antibacterial activity during the treatment perio When urinary tract infection is more severe, *t.i.d.* (q. 8 h.) dosage schedule may be requir Both regimens provide around-the-clock therapy, important because normal urinary rete during sleep tends to favor bacterial proliferation. It is also convenient for patients not to ha to take middle-of-the-night medication.

■ **Also effective in certain nonobstructed chronic and recurrent urinary tract infection**

Nonobstructed urinary tract infections, such as cystitis or pyelonephritis—chronic and/or rec rent—develop more commonly in the elderly and debilitated, and response to Gantanol is oft highly satisfactory.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

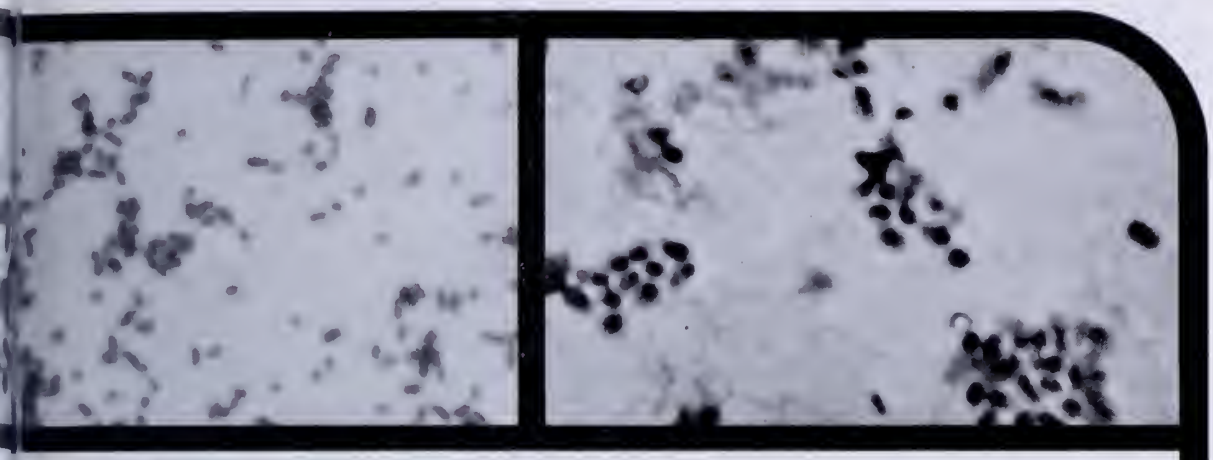
Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not era or prevent sequelae (rheumatic fever, glomerulonepl of such infections. Deaths from hypersensitivity reac agranulocytosis, aplastic anemia and other blood dysc have been reported and early clinical signs (sore t fever, pallor, purpura or jaundice) may indicate s blood disorders. Frequent CBC and urinalysis with r scopic examination are recommended during sulfon therapy. Insufficient data on children under six with ch renal disease.

Precautions: Use cautiously in patients with imp renal or hepatic function, severe allergy, bronchial asth glucose-6-phosphate dehydrogenase-deficient individu whom dose-related hemolysis may occur. Maintain ade fluid intake to prevent crystalluria and stone form

Adverse Reactions: *Blood dyscrasias* (agranuloc aplastic anemia, thrombocytopenia, leukopenia, hem anemia, purpura, hypoprothrombinemia and methem

linical practice



robacter sp.—Gram stain showing characteristic -negative rod

Proteus mirabilis—Flagella stain

our option: tablets or suspension

anol Tablets or the pleasant-tasting, cherry-flavored Suspension can provide dependable bacterial activity to control susceptible nonobstructed cystitis and pyelonephritis. Sympto- improvement usually may be expected to begin within 24 to 48 hours. Usual precautions sulfonamide therapy should be observed, including adequate fluid intake. Gantanol is rally well tolerated, with relative freedom from complications; the most common side effects ausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examina- are recommended during therapy.

on file, Hoffmann-La Roche Inc., Nutley, N.J.

onobstructed cystitis due to susceptible organisms

Gantanol® B.I.D.
ulfamethoxazole)
asic therapy

ia); *allergic reactions* (erythema multiforme, skin ons, epidermal necrolysis, urticaria, serum sickness, us, exfoliative dermatitis, anaphylactoid reactions, bital edema, conjunctival and scleral injection, pho- itization, arthralgia and allergic myocarditis); *gastro- nal reactions* (nausea, emesis, abdominal pains, tis, diarrhea, anorexia, pancreatitis and stomatitis); *eactions* (headache, peripheral neuritis, mental de- on, convulsions, ataxia, hallucinations, tinnitus, ver- nd insomnia); *miscellaneous reactions* (drug fever, toxic nephrosis with oliguria and anuria, periarteritis a and L. E. phenomenon). Due to certain chemical rities with some goitrogens, diuretics (acetazolamide, les) and oral hypoglycemic agents, sulfonamides aused rare instances of goiter production, diuresis poglycemia as well as thyroid malignancies in rats ng long-term administration. Cross-sensitivity with gents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Hill Crest HOSPITAL

For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospital, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

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HILL CREST HOSPITAL

Hill Crest Foundation, Inc.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: 205-836-7201

Alabama Joins The Hope

Janice Thames Wiseman

"It is not enough to be your patient's physician. You must also be his advocate. Once you determine what is medically best for him you must fight to get it. You may have to wheedle, cajole, to improvise whatever is necessary. You may have to jump up and down and shout. Sometimes, for the sake of your patient you have to be mean as a snake!"

The speaker was Hollis Wiseman, Mobile pediatrician on leave from the College of Medicine of the University of South Alabama, pleading with a group of his ladylike and somewhat passive Brazilian counterparts. At this outburst they conferred quickly in whispers, then protested, "But we are earthworms!"

Hollis Wiseman is not the only Alabama physician struggling to bridge cultural gaps between Americans and Brazilians on this, the thirteenth voyage of the Good Ship HOPE. Foster Eich, a Florence, Alabama pediatrician and ordained Methodist minister, is serving on the same two-month rotation in Maceio, Alagoas. The two never knew each other before they met on the HOPE.

The Medical School of the University of Alabama in Birmingham is represented by Bob Stroud, rheumatologist from the department of medicine. During his tour he has flown 1200 miles south to Sao Paulo to take part in a seminar on immunology at the world-famous Butantan Institute and Snake Farm.

A Pennsylvania plastic surgeon newly arrived on the HOPE and still recoiling from the initial cultural shocks of a new language, a new diet, a new country, and the novelty of working on a ship was overheard to remark, "I haven't figured out much for sure yet but this I know: The state of medicine in the state of Alabama must be first rate if the work of Wiseman, Eich, and Stroud is anything like the rest."

Drs. Wiseman, Eich, and Stroud work in cooperation with the permanent staff of the floating medical school to whom bridging cultural gaps is nothing new. These full-time "Hopies" have wrestled with similar situations in Tunisia, Colombia, Ceylon, Nicaragua, Ecuador, Guinea, Indonesia, the West Indies, Jamaica, Peru, and the Dominican Republic.

The language gap is the most obvious and the simplest to close. Here in Maceio Portuguese classes are held on board ship morning, noon, and night. All written materials . . . signs, menus, directions, teaching matter, appear in English and Portuguese. The HOPE's main lecture room is equipped with sophisticated listening sets for simultaneous translation by topnotch interpreters. The rotating American doctors and dentists who give two months of their time to teaching on the HOPE have interpreters who assist them on their rounds.

The hand of friendship and the hope of healing are extended to a small Brazilian boy by Alabama Doctors Hollis Wiseman (Mobile), Bob Stroud (Birmingham), and Foster Eich (Florence).

Dr. Eich studied Portuguese on his own, back in Florence, before joining the HOPE and therefore had a head start on mastering this awkward situation.

(Continued on Page 411)

Recommendations† on Combination Live Virus Vaccines

American Academy of Pediatrics

Committee on Infectious Diseases

In the September 15, 1971 *AAP Newsletter* sent to Academy members, the Committee on Infectious Diseases of the American Academy of Pediatrics stated its recommendations on the use of combination live virus vaccines. After a careful review of available data, the committee concluded that:

- "This information indicates that the products are both safe and effective when used as directed."
- The vaccine "...can, therefore, be recommended with the obvious advantages of reduction in the number of injections for any given child and a concomitant decrease in the required visits to a physician's office or clinic."

†For complete text of both recommendations see your MSD representative or write to Professional Service Dept., Merck Sharp & Dohme, West Point, Pa. 19486.

United States Public Health Servic

Advisory Committee on Immunization Practices

In the April 24, 1971 issue of *Morbidi and Mortality Weekly Report,* the Advi ory Committee on Immunization Pra tices of the United States Public Heal Service presented recommendations the use of combination live virus vaccine The committee stated that:

- "Data indicate that antibody respon to each component of these combinatic vaccines is comparable with antibody r sponse to the individual vaccines give separately.
- "There is no evidence that a verse reactions to the combine products occur more fr quently or are more seve than known reactions to th individual vaccines (see pe tinent ACIP recommend tions).
- "The obvious convenienc of giving already selecte antigens in combined for should encourage consider tion of using these produc when appropriate."

M-M-R*

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

M-M-R, given in a single injection, fits easily into your routine immunization program for well babies.

Given at age 12 months, M-M-R provides for vaccination early in life against measles, mumps, and rubella.

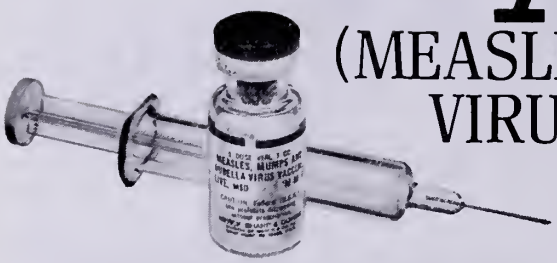
MSD suggested immunization schedule for well babies	
Age	**Vaccine(s)**
2 months	DPT (diphtheria-pertussis-tetanus) Oral poliomyelitis vaccine (triple)
3 months	DPT[1]
4 months	DPT Oral poliomyelitis vaccine (triple)
6 months	Oral poliomyelitis vaccine (triple)
12 MONTHS	**M-M-R (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE, MSD)**

1. This vaccination may be given at 3 months, 5 months, or at 6 months, depending on your preference or on the condition of the child.

Since vaccination with a live virus vaccine may depress the results of a tuberculin test for four weeks or longer, the test and the vaccine should not be given during the same office visit.

*Trademark of Merck & Co., Inc.

For a brief summary of prescribing information, please see following page.



M-M-R

(MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE | MSD)

Single-dose vials

Contraindications: Pregnancy or possibility of pregnancy within three months following vaccination; infants less than one year old; sensitivity to chicken or duck, chicken or duck eggs or feathers, or neomycin; any febrile respiratory illness or other active febrile infection; active untreated tuberculosis; therapy with ACTH, corticosteroids, irradiation, alkylating agents, or antimetabolites; blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems; gamma globulin deficiency, i.e., agammaglobulinemia, hypogammaglobulinemia, and dysgammaglobulinemia.

Precautions: Administer subcutaneously; do *not* give *intravenously*. Epinephrine should be available for immediate use should an anaphylactoid reaction occur. Should not be given less than one month before or after immunization with other live virus vaccines, with the exception of monovalent or trivalent poliovirus vaccine, live, oral, which may be administered simultaneously; vaccination should be deferred for at least three months following blood transfusions or administration of more than 0.02 ml immune serum globulin (human) per pound of body weight, or human plasma.

Due caution should be employed in children with a history of febrile convulsions, cerebral injury, or any other condition in which stress due to fever should be avoided. The physician should be alert to the temperature elevation which may occur 5 to 12 days after vaccination.

Excretion of the live attenuated rubella virus from the throat has occurred in the majority of susceptible individuals administered the rubella vaccine. There is no definitive evidence to indicate that such virus is contagious to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission, while accepted as a theoretical possibility, has not been regarded as a significant risk.

Attenuated live virus measles, mumps, and rubella vaccines, given separately, may temporarily depress tuberculin skin sensitivity; therefore, if a tuberculin test is to be done, it should be scheduled before vaccination, to avoid the possibility of a false negative response.

Before reconstitution, refrigerate vaccine at 2–8 C (35.6–46.4 F) and *protect from light*. Use only diluent supplied to reconstitute vaccine. If not used immediately, return reconstituted vaccine to refrigerator at 2–8 C (35.6–46.4 F), and discard after eight hours.

Adverse Reactions: To date, clinical evaluation has not revealed any adverse reactions peculiar to the combination. The adverse reactions that occurred were limited to those that have been reported previously for the component vaccines.

Fever, rash; mild local reactions such as erythema, induration, tenderness, regional lymphadenopathy; parotitis; thrombocytopenia and purpura; allergic reactions such as urticaria; arthritis, arthralgia, and polyneuritis.

Occasionally, moderate fever (101–102.9 F); less commonly, high fever (above 103 F); rarely, febrile convulsions.

Encephalitis and other nervous system reactions that have occurred very rarely with the individual vaccines m also occur with the combined vaccine. Experience fr more than 44 million doses of all live measles vaccin given in the U.S. by mid-1971 indicates that significa central nervous system reactions such as encephalit occurring within 30 days after vaccination, have be temporally associated with measles vaccine appro mately once for every million doses. In no case has been shown that reactions were actually caused by va cine. The Center for Disease Control has pointed o that "a certain number of cases of encephalitis may l expected to occur in a large childhood population in defined period of time even when no vaccines are a ministered. A survey conducted in New Jersey in 19 showed that 2.8 cases of encephalitis (of unknow cause) occurred per million children, ages 1–9 years p 30-day period." However, the Center for Disease Co trol has analyzed the reported reactions followi measles vaccines and pointed out that "the clusteri of cases in the period 6 through 13 days after inocul tion as well as the recovery of measles virus (probab the vaccine strain) from the CSF of one patient do suggest that some of these cases may have been cause by the vaccine." The risk of such serious neurologic disorders following live measles virus vaccine admini tration remains far less than that for encephalitis wi measles (one per thousand reported cases).

Transient arthritis, arthralgia, and polyneuritis are fe tures of natural rubella and vary in frequency and s verity with age and sex, being greatest in adult femal and least in prepubertal children. Such reactions ha been reported with live attenuated rubella virus va cines. Symptoms relating to joints (pain, swelling, stif ness, etc.) and to peripheral nerves (pain, numbnes tingling, etc.) occurring within approximately tw months after immunization should be considered as po sibly vaccine related. Symptoms have generally bee mild and of no more than three days' duration. The inc dence in prepubertal children would appear to be le than 1% for reactions that would interfere with norm activity or necessitate medical attention.

How Supplied: Single-dose vials of lyophilized vaccin containing when reconstituted not less than 1,000 TCID (tissue culture infectious doses) of measles virus va cine, live, attenuated, 5,000 $TCID_{50}$ of mumps virus va cine, live, and 1,000 $TCID_{50}$ of rubella virus vaccine, liv expressed in terms of the assigned titer of the FDA Re erence Measles, Mumps, and Rubella Viruses, and a proximately 25 mcg neomycin, with a disposable syrin containing diluent and fitted with a 25-gauge, ⅝" needl Also in boxes of 10 single-dose vials nested in a pop-o tray with a separate box of 10 diluent-containing syringes.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

MSD

MERCK SHARP DOHME

MEDICO - LEGAL DIALOG

Doctors and Lawyers in a Judge's Chamber

Howell T. Heflin

Chief Justice

Supreme Court of Alabama

EDITOR'S NOTE: *This article by Chief Justice Howell Heflin is the first in a series of articles to appear each month on medical-legal problems. Articles will be contributed by attorneys throughout Alabama.*

The administration of justice in this country is grounded on what is called the "adversary system." Under this system, the "truth" is revealed by each side stating its case in terms most favorable to its position. The trier of the facts, either the judge or a jury, then sifts through the evidence presented and arrives at a determination as to what the truth really is. The judge in such a system, by and large, is a passive observer—an umpire ruling on matters when his wisdom is invoked by one of the parties. But such is not always the case. Sometimes a judge may feel that a controversy could best be settled out of the courtroom. In such case, he might invite the parties into the privacy of his chambers where an "out of court settlement" may be reached in more amicable surroundings.

The controversy between the medical and legal professions is one in which an "out of court settlement" would be beneficial to both sides. Therefore, as a judge, I invite both sides into my chambers, and I urge both sides to consider their positions carefully as I attempt to restate the case.

The legal profession's case is easy to state. Lawyers claim that doctors are not cooperative; that they are too hard to pin down for pretrial conferences; that their written reports arrive too late or never; that doctors charge unreasonable fees for consultation and appearance as expert medical witnesses; and that they are of too little help to the attorney in understanding and planning the case on behalf of the patient-client.

On the other hand, the physician's case is also easily put. Doctors allege that lawyers are too inconsiderate of their time, with inconsiderate scheduling of cases, last-minute settlements and postponements, and long sieges around the courtroom or the deposition room waiting to testify. Further, doctors claim that lawyers are not protecting them with regard to their fees.

Generally speaking, now as of yore, doctors are reluctant to become involved in their patient's litigations. They do not like the courtroom, the legal process, or lawyers as a class in the latters' natural habitat, especially in view of increasing malpractice suits for which doctors too often blame lawyers. Doctors are asking a philosophical question: What is my obligation to the patient and to society after the healing process is completed, especially if my bill has not been paid?

Some say that both doctors and lawyers are too busy these days making money. With the volume of business booming constantly for both professions, the result is that time is in shorter supply for both and tempers are shorter for both. The close and personal relationship between doctor and patient and between lawyer and client, which thrived only a few years ago and which would often override any inconvenience or loss of time expended on the client-patient's behalf, has too often been supplanted, as the result of

mass-production in the two professions, by a hard-nosed businesslike approach based too much upon dollars and cents considerations.

Now most, if not all, of these interprofessional irritations and frustrations are "old hat." They have been discussed by both professions for years. But perhaps a fresh look at certain basic answers, many of which were approved and accepted by the two professions a long time ago, will enhance settlement of this recurring problem.

There is a basic reason for the doctor's aversion to the legal process. A fundamental difference in the methods of approach in law and medicine toward the discovery of truth is the source of this estrangement. The legal profession thrives on controversy, and the lawyer attempts to maintain his position, which he believes to be the truth, by argument and contention with opposing counsel. The physician, on the other hand, does not live by contention and controversy. His training and practice are in the clinical atmosphere of the laboratory and the hospital. He wants exploration of the case history and friendly discussion of all phases of a case. When all pertinent data are collected he correlates them and forms a judgment.

And so, by training and practice, the whole tempo of the day-to-day experience of the physician and the lawyer is essentially different. Is it any wonder, then, that the physician is reluctant to step out of an atmosphere in which he is at home and into an atmosphere of controversy and contention to which he is not accustomed, an atmosphere which irritates him and in which he feels, suddenly, like Exhibit A? Lawyers should appreciate their "home field" advantage and should refrain from exploiting it to the embarrassment of the doctor.

In addition to being unfamiliar with, and uncomfortable in, situations which are commonplace to a lawyer, physicians complain that too often they are practically made parties to the case in which they testify. It is well known of course, that some clients and some patients are not looking for legal counsel or medical advice at all; they are looking for confederates! Just as the lawyer strives to achieve the proper degree of "concerned detachment," with his client, so too must a doctor when called as a witness for his patient.

A basic reason for the doctor's reluctance to become involved in the legal process is his misconception of the function of examination and cross-examination. When the medical witness takes the stand and swears to tell the truth, the whole truth, and nothing but the truth, he gets the impression too often that, while one attorney is doing his level best to bring out the truth, the lawyer on the other side is trying equally hard to keep the truth from being brought out.

Under our adversary system, any doctor giving testimony inevitably finds himself cast in the role of either a plaintiff's witness or a defendant's witness. Try as he might to be impartial, he finds himself pulled or pushed toward one or the other of the contending camps by opposing counsel. Doctors must understand that, in our adversary system, next to his duty as an officer of the Court and as a man of honor, a lawyer's duty is to win his client's case. Quite naturally, he is going to emphasize those aspects of his client's case that will best serve his purpose and tend towards the verdict he seeks. Indeed, if he failed to do so, he would be remiss in his duties.

The discovery of truth, after all, is the objective of a legal proceeding. After centuries of experience, the Anglo-American method of seeking truth by examination and cross-examination has not been excelled by any other method known to man. A better understanding of the concept of examination and cross-examination would be helpful to every medical witness.

Another reason for the doctor's aversion to the legal process is his unhappiness about the loss of time that it necessarily entails. Everyone knows that doctors are busy and that their time should not be wasted. Doc-

(Continued on Page 408)

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SANDOZ

(Continued from Page 406)

tors may be assured that the Court and counsel are concerned about wasting the time of medical witnesses. Efforts can be, and are usually, made to plan the timing of the case and to make arrangements so that the doctor may be called at a designated time or on prearranged short notice whenever reasonably possible. But, by the same token, the physician witness must realize that the attorney in the case is also an extremely busy person with only 24 hours in his day and 30 days in his month within which to do the job the client and the Court demand of him as a fiduciary and as an officer of the Court.

In most situations, it is unfair to the client, the physician, and the cause of justice to present a medical witness who has not first conferred with the attorney and who, therefore, may not be aware of the significance to the case of the evidence he is being asked to give. It is equally obvious that, in the ordinary situation, the attorney is less able to present the full interest of his client where he has not had the advantage of advance conference with the physician. Adequate preparation for testifying is an essential and mutual obligation of the medical witness and the attorney calling him. The unprepared medical witness may do great disservice to the administration of justice.

The physician and the attorney should confer on the common problems presented in a particular case. Such conferences should be arranged in advance of the hearing, at the mutual convenience of each, with each recognizing that professional time of the other is of the utmost importance.

Physicians should appreciate the importance of promptness in providing attorneys with information. Attorneys should avoid extraneous inquiries, should plan questions carefully and should appreciate the fact that the doctor must be given adequate time to prepare a report. Undue delay, however, in providing medical reports may prejudice opportunity for settlement or other disposition of the case short of a full blown trial and thus create further expense, worry, and even loss of important testimony.

It is the physician's obligation to be in court or at deposition on time. It is the attorney's responsibility to provide advance notice so that the physician may make necessary arrangements. Good timing is not only important for the orderly and advantageous presentation of the case but also for the convenience of the Court, other witnesses, the jury, the attorneys, and other litigants. Attorneys should appreciate, however, that the physician has continuing and often unpredictable responsibilities to his patients. It should therefore be anticipated that, at times, the courtroom procedure must give way to humanitarian considerations. Prior coordination should keep these conflicts to a minimum.

It must be recognized, however, that while flexibility is an inherent and salutory quality of our judicial process, the dispatch of the business of the courts cannot depend upon the convenience of litigants, lawyers, or witnesses, including doctors.

It is the attorney's responsibility to advise a doctor promptly of a settlement or a postponement which either obviates the necessity of the doctor's appearance or requires a resetting of the time when the doctor's presence is required. It is the doctor's responsibility to do his best to revise his schedule to accommodate such necessary timing change.

Now, finally, a mild admonition as to the doctor's obligation to his patient, the judicial system, and society after the healing process is completed. Doctors have, in my opinion, a duty to the administration of justice, just as every other American citizen has the duty, to seek justice and pursue it. The treating physician has knowledge of facts that must be brought to the legal forum, whether he likes the atmosphere of the courtroom or not, whether his time could be more pleasantly and more profitably

(Continued on Page 410)

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ANGP-35

(Continued from Page 408)

spent elsewhere or not, and whether his fee for treatment is paid or not. The summons of the Court to any witness must be obeyed willingly and in a spirit of cooperation if our system of justice is to survive. This is true for the medical witness just as it is for the workingman who must lose a week's salary because he was unfortunate enough to witness an accident, or for the poor soul who must go to jail and be held as a material witness because he was unfortunate enough to witness a crime and cannot make bail. And this duty extends, I believe, to reasonable pretrial proceedings.

It is human nature to avoid and distrust that which is not thoroughly understood. To the extent that understanding overcomes the doctor's traditional distaste for the courtroom and the legal process and enables him to appreciate the lawyer's problems and attitudes, to that extent the doctor may be more receptive to the lawyer's request for assistance in the law's search for truth. To the extent that the attorney, by understanding, becomes aware of the physician's problems and thinking patterns, to that extent he will be able to deal with the physician more tactfully and with better chance of success. I hope these "in chambers remarks" will contribute in at least a small degree to the better understanding of these two honorable professions each of the other.

Now I suggest that a dialogue between both sides is in order, so I'm going to leave you two together, as judges often do, to talk things out. I am confident that whatever issues remain can be resolved, and that this case can be settled "out of court," if only you will talk to each other.

(Continued from Page 395)

Deavor, William C., Dallas 875-2134

Hodges, Emmett J., Jackson 259-1133

Jeffres, Earl M., Lauderdale 766-8851

Jones, H. Grady, Jackson 259-1133

Jones, Janice H., Jackson 259-1133

Mayfield, James R., Lee 745-4611

Rhyne, Joseph A., III, Madison 533-5856

Watson, William G., Jr., Houston 792-2621

MEMBERS REMOVED

Morgan County

Royer, William Albert, Decatur, Alabama 35601. Transfer to Nonmember.

Walker County

Mayfield, William Cato, Jr., Jasper, Alabama 35501. Transfer to Nonmember.

Meat-Wrappers Asthma May Be New Disease

"Meat-Wrappers Asthma" may be a brand new disease to plague butchers and other workers who wrap pre-cut, pre-packaged meats with plastic, says a report in JAMA.

It appears that the illness is triggered by fumes released when the workers cut the plastic wrapper with a hot wire. The result is shortness of breath, coughing and wheezing—the symptoms of an asthma attack. The problem clears up when the workers get away from the packaging room.

The problem first appeared shortly after a meat-cutting establishment began using a new plastic film to wrap the meat. Three middle-aged women workers developed respiratory symptoms when exposed to the fumes of the polyvinyl chloride film cut with a hot wire. All three were cigaret smokers, the researchers pointed out, and it is possible that they inhaled the fumes along with the smoke.

"These three case reports strongly suggest that a causal relationship exists between the inhalation of plastic fumes and respiratory symptoms. In each instance the plastic film was polyvinyl chloride made by the same manufacturer. All patients had worked in similar areas and had no respiratory symptoms wrapping meat with other materials for six to ten years prior to the use of the polyvinyl chloride film," the researchers say.

---

adjunctive therapy for wound debridement

HELPS TO REMOVE:

- Necrotic Tissue and Associated Odor

HELPS PREPARE WOUND FOR:

- Granulation/Healing
- Granulation/Grafting

CLEANSE WOUND
Thoroughly cleanse and irrigate wound area with sodium chloride or water solutions. Wound MUST be cleansed of antiseptics or heavy-metal antibacterials.

THOROUGHLY MOISTEN
Thoroughly moisten wound area either through tubbing, showering, or wet soaks (e.g., sodium chloride or water solutions).

APPLY ENZYME
Apply a layer of TRAVASE Ointment. Assure intimate contact with necrotic tissue and complete wound coverage

APPLY MOIST DRESSING
Apply loose moist dressings (most important with dry leathery eschar).

CHANGE DRESSINGS
When changing dressing, gently wipe away the dissolved material. Repeat the procedure, including application of TRAVASE Ointment, 3 to 4 times per day for best results.

Travase® Ointment
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Deerfield, Illinois 60015

Please see next page for prescribing information.

Travase® Ointment brand of Sutilains

ulcers

TERRY V. CARLE, M.D., CLINICAL INSTRUCTOR, DEPT. OF PHYS. MED. & REHAB., CRAIG REHABILITATION HOSPITAL, UNIVERSITY OF COLORADO

Before treatment, necrotic matter coated the inner surfaces of this decubitus ulcer.

After nine days of TRAVASE therapy, debridement is nearly complete and granulation evident.

burns

DALE B. DUBIN, M.D., DIPLOMATE, AMERICAN BOARD OF PLASTIC SURGERY, TAMPA, FLORIDA

Before treatment . . .

48 hours following treatment with TRAVASE Ointment on right hand; left hand is control.

Travase® Ointment

(brand of Sutilains)

Indications: For wound debridement, TRAVASE Ointment is indicated as an adjunct to established methods of wound care for biochemical debridement of the following lesions:

- Second and third degree burns,
- Decubitus ulcers,
- Incisional, traumatic, and pyogenic wounds,
- Ulcers secondary to peripheral vascular disease.

Contraindications: Application of TRAVASE Ointment is contraindicated in the following conditions:

- Wounds communicating with major body cavities,
- Wounds containing exposed major nerves or nervous tissue,
- Fungating neoplastic ulcers,
- Wounds in women of child-bearing potential—because of lack of laboratory evidence of effects of TRAVASE upon the developing fetus.

Warning: Do not permit TRAVASE Ointment to come into contact with the eyes. If contact is made, immediately rinse with copious amounts of water, preferably sterile.

Precautions: A moist environment is essential to optimal activity of the enzyme. Enzyme activity may also be impaired by certain agents (see package insert). Although there have been no reports of systemic allergic reaction in humans, studies have shown that there may be an antibody response in humans to absorbed enzyme material.

Adverse Reactions: Consist of mild, transient pain, paresthesias, bleeding and transient dermatitis. Pain usually can be controlled by administration of mild analgesics. Side effects severe enough to warrant discontinuation of therapy occasionally have occurred.

If bleeding or dermatitis occurs as a result of the application of TRAVASE Ointment, therapy should be discontinued. No systemic toxicity has been observed as a result of the topical application of TRAVASE Ointment.

DOSAGE AND ADMINISTRATION: STRICT ADHERENCE TO THE FOLLOWING IS REQUIRED FOR EFFECTIVE RESULTS OF TREATMENT:

1. Thoroughly cleanse and irrigate wound area with sodium chloride or water solutions. Wound MUST be cleansed of antiseptics or heavy-metal antibacterials which may denature enzyme or alter substrate characteristics (e.g., hexachlorophene, silver nitrate, benzalkonium chloride, nitrofurazone, etc.).
2. Thoroughly moisten wound area either through tubbing, showering, or wet soaks (e.g. sodium chloride or water solutions).
3. Apply TRAVASE Ointment in a thin layer assuring intimate contact with necrotic tissue and complete wound coverage extending ¼ to ½ inch beyond the area to be debrided.
4. Apply loose wet dressings.
5. Repeat entire procedure 3 to 4 times per day for best results.

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(Continued from Page 401)

But other more subtle gaps exist in a teaching situation where the teacher is a foreigner, an invited guest, in effect a professor on probation. This is why Dr. William B. Walsh, founder and president of the People-to-People Health Foundation that administers the HOPE, greeted the arriving team of volunteers personally in order to prepare them for what lay ahead.

"If you want to feed a hungry Chinaman for a day, give him a fish. If you want to feed him for a lifetime teach him to fish." Dr. Walsh uses this Chinese proverb to introduce his analysis of the skills required to function effectively within the framework of a medical center that sails into port and out again within the space of ten months.

Number one on Dr. Walsh's list is humility . . . humility to match that of the local doctors who invite the HOPE to come into their lives, their medical society, their community. In effect they are saying "We need you. We are looking for a better way. Show us the way." This takes a great initial sacrifice of pride on their part.

HOPE doctors, dentists, nurses, technicians, dieticians, sanitarians cannot tread too lightly when dealing with their Brazilian counterparts. They work side by side, day in and day out, and they learn from each other in a two-way process. Not every person is sensitive enough to handle this aspect of the experience successfully. But it is here that success or failure is spelled out in capital letters.

The second step, as Dr. Walsh sees it, is for the visiting professional to accept that he—as an individual—will not effect any dramatic change during his two months stay on the ship. The local leadership must choose to change conditions themselves or as soon as the HOPE sails out of the harbor the situation reverts to the status quo.

Actually the real hope for change lies not in the older medical practitioners and their related professionals but in the students who have not yet solidified their patterns of doing things.

Doctors Eich, Stroud and Wiseman (left to right) pause in the shadow of the S. S. Hope. The 3 Alabama physicians recently completed a tour of duty aboard the Hope.

For instance the typical medical student in this corner of Brazil is not accustomed to questioning his professors, to challenging anything he hears or reads, or to using the medical library on his own. He accepts what he is told, memorizes but does not reason, recites but does not act. If he can be incited to wonder, to question, to dig into a mystery independently . . . . this can be called progress.

Thirdly a HOPE doctor must learn to hide his amazement and shock at conditions under which the local doctors labor. For this reason Dr. Walsh rejects donations of highly automated medical equipment. If the host community does not have such facilities there is no point in teaching their uses. To the contrary, it would be arrogant to do so.

And lastly HOPE doctors are encouraged to work with their counterparts to develop a program of community health care fashioned around the needs of the patient rather than the needs of the physician.

In the Brazilian northeast the practice of medicine is designed to answer the needs of that affluent minority which seeks and can afford medical care. For instance in a community rampant with opportunities for doing life-giving procedures in plastic surgery, fancy surgeons are flown up from Rio to perform such trivial operations as

(Continued on Page 414)

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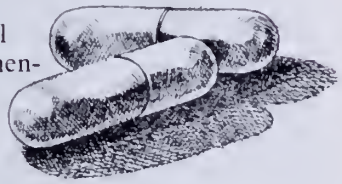

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ecautions: In elderly and debilitated, limit dosage to smallest fective amount to preclude development of ataxia, oversedan or confusion (not more than two capsules per day initially; crease gradually as needed and tolerated). Though generally t recommended, if combination therapy with other psychopics seems indicated, carefully consider individual pharmalogic effects, particularly in use of potentiating drugs such as AO inhibitors and phenothiazines. Observe usual precautions presence of impaired renal or hepatic function. Paradoxical actions (*e.g.*, excitement, stimulation and acute rage) have en reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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(Continued from Page 411)

mammary reductions, face lifting, nose jobs, and abdominal reductions.

Dr. Walsh puts it this way: "I wonder sometimes if problems in our professional world have not too often been the result of the fact that we are concerned more about what is good for the physician than what is good for the patient. This to me is where the most vital part of medical education must be . . . to teach the student the humility for himself and the dignity of the patient, the meaning of disease, and the meaning of sickness, not only to the patient but to the family."

The situation confronting the HOPE staff in this country of over 94 million people can best be illustrated by the following estimates:

Average life expectancy	63 years
Percentage of deaths occurring in children under five years	50 per cent
Ratio of physicians to population	1:2,530
Ratio of dentists to population	3:10,000
Ratio of graduate nurses to population	1:10,000
Ratio of hospital beds to population	3.6:1,000
Percentage of national population under age 15	44 per cent

Since the northeast region of Brazil, where the HOPE effort is concentrated, is subject to cycles of drought and flood which have historically imposed devastation and chronic poverty on its people, these national estimates do not reflect the true seriousness of the local conditions. Here, where nutritional problems are endemic, communicable diseases account for 40 per cent of all deaths. Polio, tuberculosis, Chagas' disease and schistosomiasis are widespread. Brazil is the major reporting nation for smallpox. In the interior there are still pockets of leptospirosis, rabies, the plague, yellow fever, Kwashiorkor, marasmus and leprosy.

Obviously the advance teams which go forth to choose sites for future HOPE programs have found a gold mine of preventable pathology in their selection of northeast Brazil. Whether they can bring about change for the better depends on the receptiveness of the host government, the diplomacy with which HOPE physicians such as Drs. Eich, Stroud and Wiseman present their case for modernization of the region's medical structures, and the effectiveness of this combination to revamp, refinance, and reform the total health delivery system of an emerging giant.

Back to our three Alabamians . . . . . Drs. Stroud and Eich chose to come alone and therefore live and eat on the ship. They work all over town . . . in the medical school, in public health clinics, malnutrition day care centers, on the wards of the university hospital, anywhere they can be integrated into the local medical education picture. The expense of their round trip plane fare and room and board on the ship is borne by Project HOPE in exchange for two months service.

Dr. Wiseman found it impossible to leave his wife and six children ranging from eight to nineteen years of age at home in Mobile. They were packed and ready to go before he received word from the Washington office that he had been accepted.

The HOPE administrator in Maceio therefore helped the Wisemans find a beach house to rent at their own expense, put all seven to work on the ship in volunteer positions and fed them in exchange. Dr. Wiseman's plane fare was borne by the HOPE but that of his family was his own affair.

Other Alabama "Hopies" are Dr. Herschel Bentley, chairman of the Department of Pediatrics, University of South Alabama, who served as a visiting professor in Cartagena, Colombia and Ceylon; Rick Smith, chief pediatric resident of the University of Alabama Medical School who did a rotation in Natal, Brazil; Bill Daniels, chief of the adolescent medicine service, University of Alabama, who is on the HOPE medical ad-

visory board and also is in charge of its pediatric program. In the past the Birmingham medical center has rotated both residents and medical students through the Good Ship HOPE.

Some people prefer superficial travel . . . . the "This must be Brussels because it's Tuesday" approach. Others like to dig just as deep as they can into a culture, making friends, asking questions, watching, wondering, digesting every encounter, every sunset, every mystery, riding first class, riding fifth class, tasting every drink once.

For the first group, the tourists, the HOPE experience is to be avoided like the plague. For the latter group there is probably no better way to travel than as the honored guest of a country which has invited the S. S. HOPE to come and shine its special light on their problems.

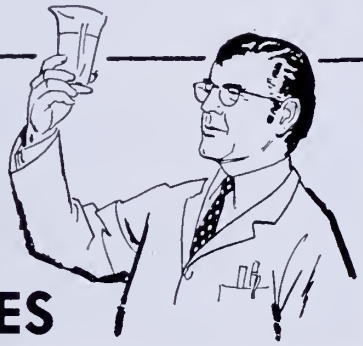
Pedalling Rats Aid Arthritis Research

A University of Wisconsin researcher, using rats strapped into a bicycle-like device, has found that the amount of exercise applied to a leg changes bone size and mineral content affecting the strength of the bone.

Dr. Ali Seirig, a mechanical engineer at the UW campus in Madison, is studying the effects of stress on bone mineral content, the role of muscle fatigue in fracture, and the causes of wear in joints.

He says an overload of exercise leads to damage in the joints because, like bone, cartilage increases in mineral content when placed under stress.

Dr. Seirig pointed out that "joint temperature may actually prove a good tool for measuring damage in living animal joints. This and the other techniques we have developed provide a tool for testing drugs and methods of treatment to avoid arthritis that comes from stress."



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Medical Profession Self Discipline Urged

The medical profession must discipline itself if doctors are to avoid passage of harsh laws to curb unethical conduct, says an editorial in JAMA.

"Medical societies appear to have been reluctant to tackle tough problems relating to questionable actions by their members. It is amazing how many excuses can be found for not conducting an investigation or for not taking action," says the editorial.

"The profession must not rely on excuses. If discipline is necessary, it should be administered.

"In the legal profession, there is a saying that hard cases make bad law. This hip-pocket maxim can be applied to medicine. When cases of alleged unethical conduct are not handled within the profession and are 'exposed' to the public as not handled, the ends of justice are overshadowed by the dictates of expediency and pragmatism. Hard law results. Reaction, overreaction, backlash—bad law is inevitable.

"To the extent that medical society discipline is observed (and demonstrated to the public as being viable), restrictive judicial and statutory regulations will be avoided. With each example, feeling builds up, and it may manifest itself unexpectedly as the result of some trivial episode.

"Medical societies alone and medical societies in concert with boards of medical examiners have two responsibilities today in medical discipline: (1) they must impose discipline when it is reasonably called for, and (2) they must publicize their actions so the faith of the public may be restored."

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Summary

ns—Placidyl (ethchlorvynol) is indicated
term hypnotic therapy in the management
nia.

dications—Drug hypersensitivity and por-

s—Not recommended during the first and
rimester of pregnancy. Caution patients
ble combined exaggerated effects with
barbiturates, tranquilizers or other CNS
nts. Exaggerated effects might result in
of vision, paralysis of accommodation and
hypnosis. Caution patients concerning
motor vehicle, operating machinery, or
ardous operations requiring alertness af-
the drug. ADMINISTER WITH CAUTION
ENTS WITH SUICIDAL TENDENCIES AND
PRESCRIBE LARGE QUANTITIES OF THE
djustment of the dosage of oral anticoag-
ght be necessary when beginning ethchlor-
erapy, during therapy, or after stopping
This drug is not recommended for use in
PLACIDYL HAS THE POTENTIAL FOR
VELOPMENT OF PSYCHOLOGICAL AND
L DEPENDENCE. INSTANCES OF SE-
VITHDRAWAL SYMPTOMS, INCLUDING
SIONS AND DELIRIUM CLINICALLY SIM-
THOSE SEEN WITH BARBITURATES,
EEN REPORTED IN PATIENTS TAKING
R DOSES AS LOW AS 1000 MG. PER DAY
PERIOD OF TIME WHEN THE DRUG WAS
LY DISCONTINUED. PROLONGED AD-
ATION OF THE DRUG IS NOT RECOM-
. Addiction-prone patients or those who
to increase dosages of the drug on their
ative should be observed for evidence of
symptoms which may indicate possible
hdrawal or abstinence symptoms. Signs
toms associated with withdrawal and ab-
include unusual anxiety, tremor, ataxia,
of speech, memory loss, perceptual dis-
irritability, agitation and delirium. Other
defined signs and symptoms, not neces-
e to withdrawal and abstinence, may in-
orexia, nausea or vomiting, weakness,
sweating, muscle twitching and weight
upt discontinuance of Placidyl following
d overdosage may result in convulsions
um.

ns—Toxic amblyopia has been reported
g-term continuous use of ethchlorvynol.
t visual defects have been observed, al-
mblyopia has improved after discontinua-
e drug. Drug dosage should be limited
y and debilitated patients to the smallest
amount. If pain is present, this drug
nly be given if insomnia persists after
ontrolled with analgesics. Caution is ad-
prescribing the drug for patients who are
ated with either MAO inhibitors or anti-
nts. Transient delirium has been reported
combination of Placidyl and amitryptyline.
age should be reduced if prescribed for
receiving MAO inhibitors or antidepres-
aution should be exercised in patients
aired hepatic or renal function. Patients
ond unpredictably to barbiturates or alco-
o exhibit excitement and release of inhi-
association with such agents, may also
his way to Placidyl. Rarely, patients may
mptoms suggestive of an unusual sus-
to the drug; such as prolonged hypnosis,
muscular weakness, excitement, hysteria,
e without marked hypotension. Transient
or ataxia may occur.

Reactions—Hypotension, nausea or vom-
tric upset, aftertaste, blurring of vision,
facial numbness, and allergic reaction
y urticaria have been reported following
dministration. Mild "hangover" and symp-
mild excitation have occurred in some
here have been rare reports of cholestatic
occurring in patients taking ethchlorvynol.
ses of thrombocytopenia have been re-
patients receiving ethchlorvynol. 306433

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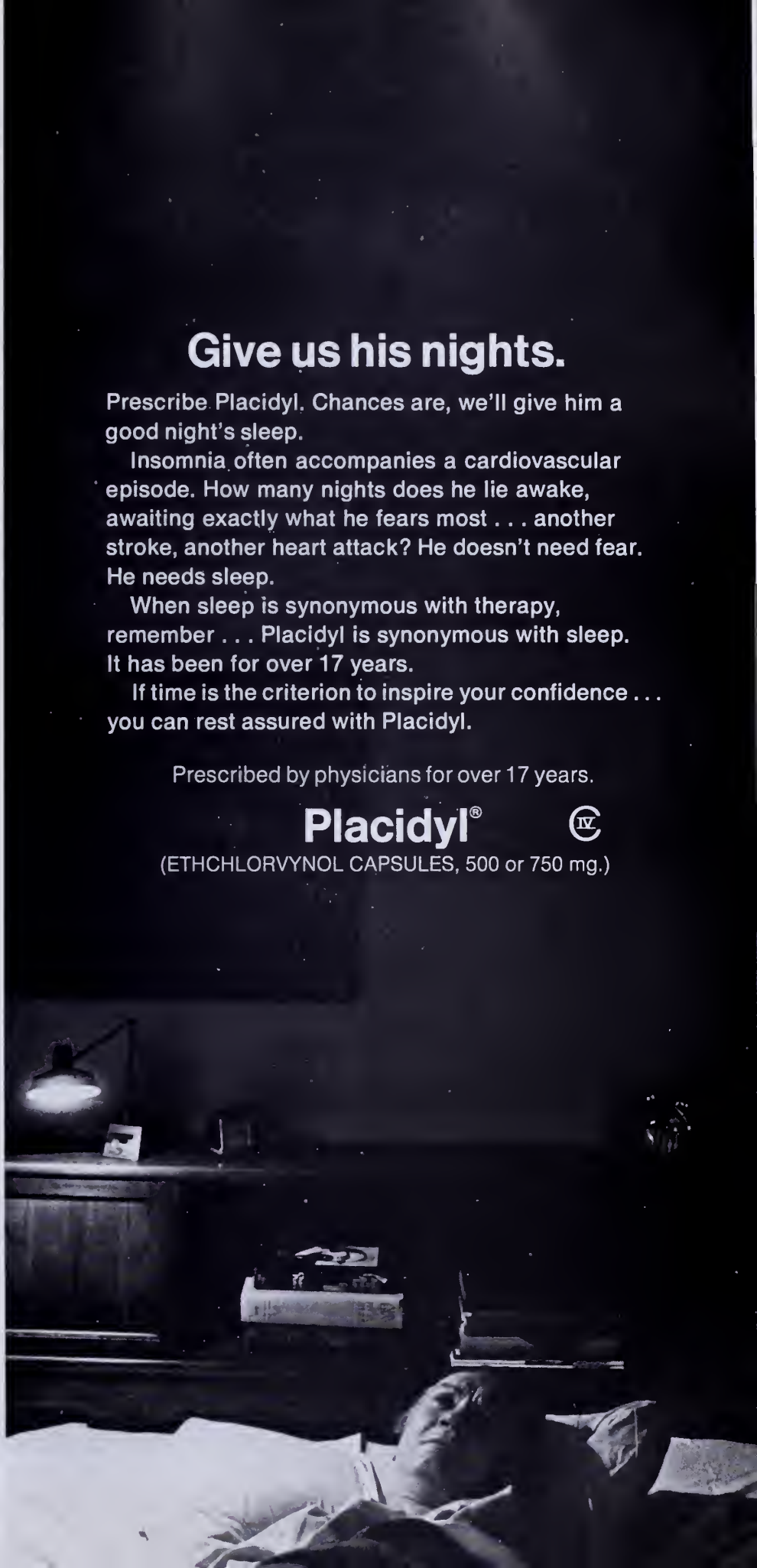

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President's Page

Report on AMA Meeting in Anaheim

It was my pleasure to attend the Anaheim Meeting which was held at Disneyland on December 1-5, 1973.

There were many very important subjects discussed by the House of Delegates and by various members of the Association. I would have to say in all honesty that the PSRO controversy stirred much more conversation than any of the points on the agenda. There are several fairly large delegations who have taken a stand for immediate repeal of PSRO. The leadership of the American Medical Association feels that repeal at this time would not be in the best interest of medicine. One of the principal reasons against repeal at this time is that we would be recommending the repeal of a law which has yet to be tried. It is the feeling of the Board of Trustees of the American Medical Association that we should try to make PSRO work; and if there are sections within the bill which we cannot tolerate, to have these amended in due time. The State of Alabama, of course, has voted to give PSRO a fair trial. It is conceivable that there may be more good than evil in this bill. I urge all Alabama physicians to give PSRO a real opportunity to work. The alternatives could be much more restrictive than the PSRO law as it is now written.

The matter of a patient stating his desire to die in dignity was also discussed in some detail. I feel that the Judicial Council has done a great job in considering the many points of view. Some of the positions presented to the Judicial Council included prepared statements for a patient to sign after discovery of his terminal illness.

DR. CAMP

It was the feeling of the Judicial Council, expressed very well in the following quotes that: "The intentional termination of the life of one human being by another—mercy killing—is contrary to that for which the medical profession stands and is contrary to the policy of the American Medical Association."

"The cessation of the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is a decision of the patient and/or his immediate family. The advice and judgment of the physician should be freely available to the patient and/or his immediate family." I heartily agree with this point of view.

Another point of great interest concerns the determination of death. This problem is becoming much more complex each year because of the numerous advances being made i. e. artificial hearts, artificial kidneys, artificial valves, etc. It was thought by some of the delegates that a precise legal definition of death might help the physician in making this most important decision. It was the feeling, however, of the Judicial Council that we should reaf-

(Continued on Page 432)

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

The lesions on his face are solar/actinic— so-called "senile" keratoses... and they may be premalignant.

Solar, actinic or senile keratoses

These lesions may be called by several names, but they usually can be identified by the following characteristics. The typical lesion is flat or slightly elevated, of a brownish or reddish color, papular, dry, rough, adherent and sharply defined. They commonly occur as multiple lesions, chiefly on the exposed portions of the skin.

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Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

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How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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"Date with Disaster" has been produced by President's Office of Emergency Preparedness and is intended to be a training model for communities interested in their own emergency medical preparedness capability. The film runs 30 minutes and is a 16 mm Kodachrome production.

The film examines a 118 hospital emergency system in Southern California. The system was tested severely during the February 9, 1971, earthquake and the film documents its effectiveness.

Mr. William Gallagher, Chief, Film Distribution Branch, National Audiovisual Center, General Services Administration, Washington, D. C., 20409, is the contact for the free loan of the film.

The University of Arkansas Medical Center has produced a 16 mm color film entitled, "Wound Healing I. Secondary Intention." The 24 minute examination of the basic processes involved in the secondary healing of wounds is animated in part.

The AMA has obtained the film and a copy can be ordered from: Film Library, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

"Early Abortion" emphasizes the importance and proper use of birth control methods to prevent future unwanted pregnancies. It is available in 16 mm color and Super-8 cassette and can be obtained by writing Vaughn Obern, Marketing Director, Ramsgate Films, 704 Santa Monica Boulevard, Santa Monica, California 90401.

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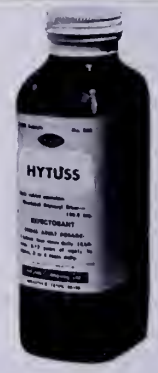

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Guest Editorial—Medical-Legislative Liaison

Andrew M. Brown, M. D.
Gadsden, Alabama

During the past legislative session, three Representatives from my county voted diametrically opposed to the positions sponsored by the State Medical Society. Fortunately, the Senator from my county voted in accordance with those measures. My initial reaction was one of anger and distrust. After more carefully weighing the matter, I decided that this was not a problem solving approach. I then contacted the members of the Legislature from my county and learned the following bits of information.

1. According to my legislative representatives, doctors never contacted them on pending legislation of significance to the medical community, either pro or con, on a personal basis. Meetings had been held where a group from the medical community sought to meet with all of the Representatives and the Senator.

2. These Representatives had been supported by special interest groups while they were campaigning and had made certain commitments during their campaign to support legislation derived to benefit these special groups.

3. In the past, certain medical personnel had presented their position before legislative committees but, by their own arrogance and demeanor, created a negativism which was not receptive to an open endorsement of certain of their proposals nor to an atmosphere of compromise.

4. There were, at times, considerations which were of interest only to special groups within the medical society. They, as laymen, had no way of fully evaluating the importance of these special interests. An illustration given was a bill that would have exempted medical students, interns and residents from the provisions of the Medical Practice Act. In this situation, the Medical Association of the State of Alabama and the Medical School held divergent opinions. The Representatives chose to go with the larger society in this instance.

These men and women are actually trying to be the representatives of the people. They are attempting to respond to the wishes of what they consider to be the majority or the most interested groups. It is still the "squeaking wheel" that gets the grease.

Now let us have some positive action! Each of you who reads this probably is, or know who is, the personal physician or surgeon of a legislator from your area. Get them to be the liaison between the medical and legislative groups. Make it your business to be the spokesman for the state and county societies. Help legislators to develop, sponsor or support good legislation. If you do not know the position of the State Society or the pros or cons of an issue, call the state association and you will get help. But don't do nothing and expect a few to do it all for you. It is either put up or shut up—and if you don't put up, there are those waiting to shut you up. To paraphrase Cassius, "The fault is not in our stars but in ourselves . . ."

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

MRS. GRADY

Alabama's First Health Education Workshop

I am very happy to report to you that Alabama's first statewide Health Education Workshop held in Birmingham on October 17-18, 1973 was a complete success. Approximately 200 attended including auxiliary members, educators, representatives from Planned Parenthood, Jefferson County Department of Public Health, National Foundation—March of Dimes, Alabama Dietetic Association, Alabama League of Nursing, Alabama State Nurses Association, Alabama Cancer Association and many others. Response from people attending was overwhelming and made the many months of preparing this workshop well worthwhile. My gratitude goes to the Jefferson-Bessemer and the Jefferson-Birmingham auxiliaries for hosting this meeting. Totsie Young, State Health Education Chairman and her wonderful committees are to be congratulated.

I shall always be indebted to the following speakers; George Lewis Bailes, Jr., Dr. Keith Blayney, O. Thomas Bolding, M. D., Erskine D. Carmichael, M. D., Derrell Crowe, M. D., William Daniels Jr., M. D., Sara C. Finley M. D., Charles Edward Herlihy, M. D., James C. Johnson, M. D., Patrick H. Linton, M. D., Hal Pierce, Dr. Eileen N. Slack and Mary B. Tiller, M. D. from our own Jefferson County who participated and contributed so much to make our Health Education Workshop a huge success.

This article would not be complete without thanking Sue Boe, Effie O. Effis, M. D., Dr. Harold Minor, Jr. and Rev. Charles Murphy Jr. for their efforts in making our first workshop truly outstanding.

My sincere thanks for the generous financial support of the Medical Association of the State of Alabama, The University of Alabama in Birmingham and the Department of Health, Physical Education and Recreation.

Helping with the success of this meeting were exhibits by the National Pharmaceutical Association, State of Alabama Department of Public Health, G. D. Searle & Company, Planned Parenthood - World Population, Health Careers Council of Alabama, National Foundation-March of Dimes, Alabama Cancer Association and Alabama Dietetic Association.

(Continued on Page 432)

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Contraindications: Thyrotoxicosis, acute r dial infarction. **Side effects:** The effects THROID (sodium levothyroxine) therapy a in being manifested. Side effects, when occur, are secondary to increased rates metabolism; sweating, heart palpitatior or without pain, leg cramps, and weigl Diarrhea, vomiting, and nervousness ha been observed. Myxedematous patien heart disease have died from abrupt in in dosage of thyroid drugs. Careful obse of the patient during the beginning of a roid therapy will alert the physician to toward effects.

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most cases with side effects, a reduction of ge followed by a more gradual adjustment ard will result in a more accurate indication e patient's dosage requirements without the arance of side effects.

ge and Administration: The activity of mg. SYNTHROID (sodium levothyroxine) ET is equivalent to approximately one grain id, U.S.P. Administer SYNTHROID tablets single daily dose. In hypothyroidism with- myxedema, the usual initial adult dose is ng. daily, and may be increased by 0.1 mg. 30 days until proper metabolic balance is ed. Clinical evaluation should be made hly and PBI measurements about every 90 . Final maintenance dosage will usually e from 0.2-0.4 mg. daily. In adult myxedema, ng dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

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1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. *49*:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

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(Continued from Page 423)

firm Report A of the Judicial Council which states, "Death shall be determined by the clinical judgment of the physician using the necessary, available and currently accepted criteria." I think this, too, was a very wise decision.

In conclusion, I hope that this discussion will stimulate each of you to think about the points covered. I feel these are all most important problems which must be faced at this time.

E. E. Camp, M. D.
President

Decline In Infant Mortality

The infant mortality rates in Alabama and the nation are showing a marked decline. In infant deaths (under one year) Alabama has dropped from 23.2 per 1,000 live births in 1971 to 18.1 in 1972. As of September, 1973 the rate was at 15.9.

This contrasts with the national rate which had a record low for 1972 of 18.2 per 1,000 live births and as of July, 1973, a rate of 16.7.

One factor that may be contributing to lowering infant death rates nationally, is the corresponding drop in births. In 1972 there were slightly more than 3 1/4 million births—about 9 per cent lower than the previous year.

A recent study put proper prenatal care in perspective showing its major role in increasing an infant's chances for life. Mortality rates ranged from 11.9 per 1,000 among a "no risk" group, to a high of 41.7 per 1,000 among those with both sociodemographic and medical-obstetric risks. Most of the medical-obstetric risks were, or could have been, identifiable at the first prenatal visit.

(Continued from Page 429)

I hope that this is just the beginning and not the end; and that future health education workshops will be held in the State of Alabama.

Betty Grady, President

Course to be Offered on the Care of the Athlete

The Medical Association of the State of Alabama is joining forces with five other agencies to sponsor a two day course on care for Athletes.

The "First Annual Course on the Care of the Athlete," is scheduled for February 8 and 9 at The All American Inn in Auburn and is designed to assist in preparing and caring for the high school or adolescent athlete. MASA, Auburn University Athletic Department, the School of Health, Physical Education and Recreation of the University of Alabama, Alabama High School Athletic Association, Alabama Department of Education, and the division of Emergency Medical Services, Department of Public Health are the five co-sponsors for the two-day course.

The course is designed to offer to coaches, trainers and emergency medical technicians instruction on in-season and off-season, proper equipment, conditioning, heat exhaustion, head and neck injuries and leg injuries.

Proper equipment, qualified trainers, and team physicians are critical to the safety of any athlete, but are most especially critical to the student or adolescent athlete. The "First Annual Course on the Care of the Athlete" is a state wide educational effort which will benefit thousands of subcollegiate level athletes throughout Alabama.

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Medical Schools Report Continued Growth

Significant increases in total enrollments of American medical schools were again reported during the 1972-73 school year. Preliminary figures indicate the total will be even greater for the current academic year.

First-year enrollment in 1972 increased by 1,335 to 13,726. Total enrollment was 47,546, an increase of 3,896 students over the previous academic year.

The increase was achieved both by opening new schools and by expanding enrollment at many of the existing schools. Total number of medical schools in the fall of 1971 was 108. Three new schools opened in September, 1972; another in January, 1973; another in June, 1973, and another in September, 1973, for a total of 114 by the end of the 1973-74 academic year.

The number of graduates in the class of June, 1973, reached an all-time high of 10,391, which was 842 more than in the previous year.

Medical school enrollment in the United States has been increasing steadily for more than ten years, and at an even more rapid rate in the past six years. From 1960 to 1966, enrollment grew about 500 per year. In 1967 the increase amounted to 1,115 students. In 1968 it was 1,295 students; in 1969, 1,836; in 1970, 2,818; in 1971, 3,163, and in 1972, 3,896.

It is estimated that first-year enrollment will exceed 15,000 by the 1976-77 academic year.

Still more progress was made in the area of continuing education, whereby the physician keeps abreast of new developments in medicine. The AMA Physician's Recognition Award for participation in continuing medical education has shown a steady growth. A total of some 40,500 physicians have qualified for the award.

Interest continues to grow in the field of family practice. Forty-nine medical schools now have undergraduate programs in family medicine, most established within the last three years. Another 11 schools have programs in development. At the graduate level, the number of approved residencies in family practice increased from 70 in 1971 to 172 in 1973.

The opening of new medical schools has slowed down. As of the fall of 1973, there were, for the first time in some years, no schools listed as being in development that had not yet admitted students. However, planning is under way for 16 more schools.

Full-time medical school faculty also reached a new high in 1972-73, with a total of 33,550. Also there were almost 70,000 part time paid and volunteer faculty members to supplement the full-time staff. Medical school faculty members also teach many students in basic life sciences, allied health professions and other areas in addition to medicine.

Some 30.9 per cent of the first-year class in 1972-73 were "A" students; 64.3 per cent were "B" students, and only 4.8 per cent were "C" students. Of the total, 82 per cent held bachelor's degrees; 5 per cent masters, and 2 per cent doctorates. Eleven per cent had not earned a degree in college.

Dropout rate continues very low in medical schools, only 1.2 per cent of the total enrollment in 1972-73.

The proportion of women in the student body increased to almost 13 per cent from 11 per cent a year earlier. The first-year class was 17 per cent women.

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CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

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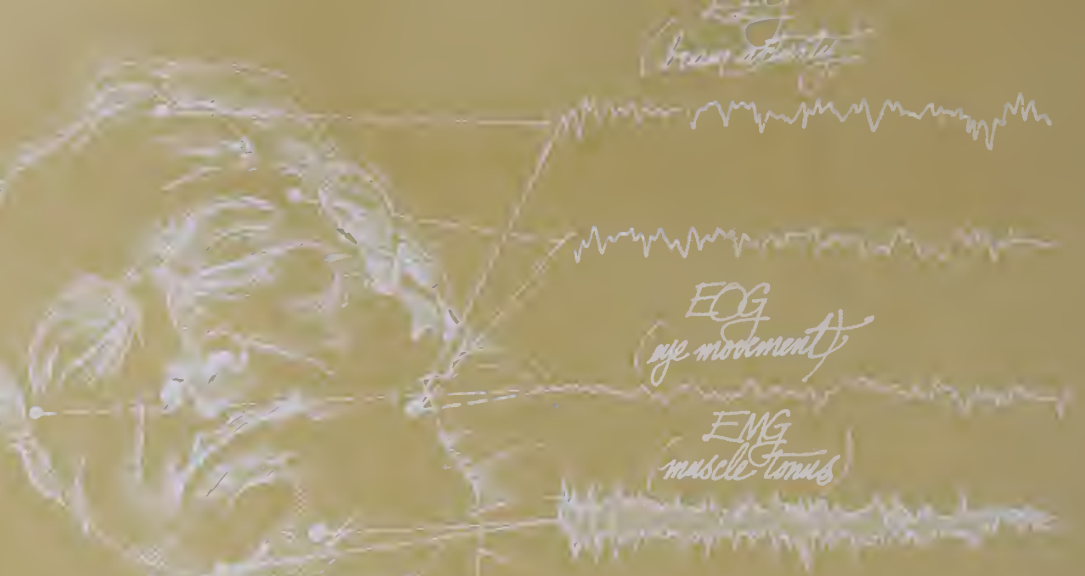

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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage, 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

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The Executive Committee of the American College of Obstetricians and Gynecologists

The Board of Regents of the American College of Physicians

The Board of Trustees of the American Dental Association

The Board of Trustees of the American Medical Association

The American Psychiatric Associatic

The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

›int Statement on Antisubstitution Laws and Regulations

The purpose of this statement is › affirm the support of the participat- 'g organizations for the laws, regula- ›ns and professional traditions which ·ohibit the unauthorized substitution ' drug products.

Traditionally, physicians, den- sts and pharmacists have worked ›operatively to serve the best inter- ›ts of patients. Productive coopera- ›n has been achieved through ıutual respect as well as a common ›ncern for the ideals of public ·rvice. This mutual respect has been ·flected, in part, by joint support ·er the years for the adoption and ıforcement of laws and regulations ›ecifically prohibiting unauthorized ıbstitution and encouraging joint scussion and selection of the ›urce of supply of drug products. ıe basic principles of medical, den- l and pharmacy practice are thus ·ilized and preserved in the interest patient welfare.

The antisubstitution laws have ›t obstructed enhancement of the ·ofessional status of pharmacy any ore than they have in and of them- ·lves guaranteed absolute protec- ›n from unsafe drugs, or freed ıysicians, dentists and pharmacists ›m their responsibilities to patients. › a practical matter, however, such ws and regulations encourage inter- ·ofessional communications regard- g drug product selection and assure ıch profession the opportunity to ·ercise fully its expertise in drug ›age, to the advantage of patients.

Physicians and dentists should › urged to increase the frequency ıd regularity of their contacts with ıarmacists in selection of quality ·ug products, recognizing that economies to patients can be im- proved through such communica- tion, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physi- cians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selec- tion remain primary and do not per- mit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved under- standing and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthor- ized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

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Methohexital In General Anesthesia

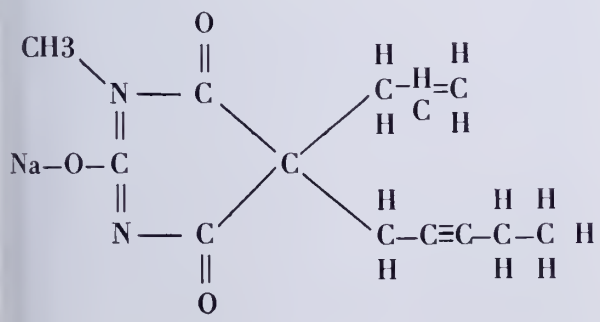
by W. R. Anderson, M. D. and J. D. Nettles, M. D.

Camden, Alabama

The search for a general anesthetic which contains the following features is ever present in the minds of anyone giving anesthesia:

1. Base of induction
2. Rapid analgesia
3. Minimal respiratory depression
4. Minimal change in blood pressure
5. Minimal change in cardiac rate and rhythm
6. Maximum muscle relaxation with need of minimal amount of muscle relaxants such as Succinyl and others which reduce respiratory excursion
7. Oxygenation of blood along with maintenances of CO_2 in the blood stream within normal ranges
8. Rapid reversibility
9. Bronchodilation

Methohexital sodium seems to come nearer meeting these requirements than any which is presently on the market. It was known as compound No. 25398 and its possible uses were first reported by Dr. V. K. Stoelting in 1957.[1] The drug chemically is sodium 1-methyl-5-allyl-5 (1-methyl-2-pentylyl) barbiturate. It has a p^H of 11.



One of the amazing things about methohexital is the rapid recovery of the patient when the anesthesia is stopped. There is no evidence of accumulation following long operations.[2]

In May 1959, Friedman reported its use as a good anesthetic in electrocerebral therapy.[3] He used this anesthetic in 72 patients giving a total of 696 trials. He even commented that the intermediate metabolites of methohexital and its isomers may have further importance in neuropsychiatry. The exact metabolism of methohexital has not been established.

In October of 1959, Egbert, Oech, and Eckenhoff did a comparative study of the recovery from methohexital and thiopental anesthesia in man.[4] They concluded, using 14 subjects, that methohexital produced hypnosis lasting approximately two-thirds as long as equivalent doses of thiopental and that complete recovery was twice as rapid. There was significantly a higher incidence of motor activity with methohexital than with thiopental.

In May 1960, Bellville et al using electroencephalographic changes commonly associated with barbiturate anethesia reported that methohexital was 2.78 times as potent as thiopental.[5]

Dr. Max Douglas reported the successful use of methohexital in 95 unselected cases of difficult and handicapped dental patients with ages ranging from 2 to 12 years. He experienced only a mild rise in blood pressure, no coughing or laryngospasms, no de-

pression of respiration, and that the patients were able to leave his dental office in 15-30 minutes.[6] These results have been duplicated by many since then.

In October 1962, Schumacher reported the use of methohexital in 10 per cent solution with 10mgm/pound as a guide as a basal anesthetic rectally in pediatrics. She noted that it is a parasympatholytic acting drug and thusly dilates the bronchi. Thiopental is a broncho constricting agent and thusly compounds the use of inhalation anesthetics.[7] This explains why there is a period of apnea and bag breathing is necessary using thiopental as an induction agent.

Marshall reported in April 1964 the use of methohexital sodium in obstetrical cases. He summarized his study that in human antepartum placental passage methohexital sodium rapidly crosses the placental barrier with peak umbilical venous concentrations occurring in two to three minutes after maternal injections. Umbilical concentrations are dose related.[8] Then in 1965 Peter F. S. Lee reported the use of methohexital anesthesia in Caesarian sections in 56 consecutive cases that he could find no anesthetic problems in either the mother or baby.[9] Both doctors used the Apgar score method to determine evidence of distress in the baby and could not relate anything due to methohexital sodium.

Lemburg and Costellanos reported their experience in using methohexital sodium as a general anesthetic in converting 203 different episodes on 167 patients with arrhythmias back to a normal sinus rhythm.[10] The patients were ones with atrial flutter and or atrial tachycardia and ventricular flutter and or ventricular tachycardia. This was their drug of choice as an anesthetic.

Sunshine et al did studies on methohexital as to the distribution and excretion in man in January of 1966.[11] Their conclusions were that the drug is 99 per cent metabolized in the body as less than 1 per cent was identified in the urine. They also showed that the drug reaches its maximum concentration in arterial blood within two to five minutes after injection. Biotransformation of methohexital is only slightly faster than thiopental.

In November 1964, the authors first began using methohexital sodium (brevital[RX]) for want of a safer and better anesthetic which would meet the criteria as listed for any general anesthetic. These results are as follows:

Time in third stage anesthesia (actual time of surgery)

15 minutes or less	27 cases
15 to 45 minutes	55 cases
45 to 90 minutes	101 cases
90 minutes or longer	31 cases

The average time of induction was five minutes. Intubation was done on two patients for convenience of the surgeon as these were oral surgery cases. Nasal oxygen was routinely given as a precautionary measure. There were no anesthetic complications. There were no anesthetic or surgical deaths. These were unselected cases of a general surgical nature as seen in a small rural hospital. There were no chest cases. There were no radical surgery cases.

Brevital[RX] was not used in one case because of difficulty in finding a good vein. The patient elected to accept another anesthetic rather than have a vein cut down. There were no cases of drug sensitivity. There were no cases of porphyria.

The average case required 20 mgm per minute to keep in third stage anesthesia. Awakening time averaged less than ten minutes after the discontinuance of the drug. No accurate record was kept of the awakening time and ten minutes is an estimated time. This is based on response to stimuli. The length of time or type of surgery or the amount of methohexital had no bearing on the awakening time.

Methohexital must be given at two to five minute intervals in doses of one to three cc (10 to 30 mgm) in order to keep the patient in the proper stage of anesthesia. No stimuli were required on awakening.

There were no cases of caesarian section. It was not used in any obstetrical deliveries.

The ages range from 10 to 90 years. Sex, age, ethnic origin, obesity, and diseases even though not tabulated here had no bearing on the use of methohexital. Porphyria is the only known condition which methohexital as well as the other barbiturates is contraindicated.

From a pharmacological viewpoint methohexital, since it is bronchial dilator and oxygen carrying barbiturate, should be the drug of choice for general anesthetic in cardiopulmonary disease. There were no serious cardiopulmonary diseases identified in this series of patients.

The bulk of the short procedures were outpatient closed reductions and dislocations and the like.

The majority of the procedures from 15 to 45 minutes were d & c, surgical excisions of tumors of face, lips, ears, trunks & extremities, or rectal surgery.

Most of the cases from 45 to 90 minutes were appendectomies, herniorrhaphies, laparotomies, repair of cystoceles and rectoeles, and open reductions with pin insertions.

Those case procedures of over 90 minutes were mostly hysterectomies, skin grafts, and tendon repairs.

A breakdown of the actual cases in this series is as follows:

Open reduction with pin insertions	22
Laparotomies	2
Closed reductions & dislocation	10
Repair of rectoceles and or cystoceles	4
Amputations	3
Breast tumors-simple removals	16
Skin tumors and grafts, etc.	33
D & C including Conization	32
Liver Biopsy	1
Circumcision	1
Hysterectomies	4
Oral dental surgery-extractions	2
Appendectomies	31
Tubal ligations, oophorectomies, etc.	5
Herniae-various types	36
Traumatic surgery, tendon repairs, etc.	7
Hemorrhoidectomies	5

SUMMARY:

1. The development and pharmacology of methohexital has been presented.

2. Its use in a limited sense has been widely accepted.

3. Its use as a general anesthetic in a small rural hospital has been reported.

4. It is a broad spectrum anesthetic and can be used in many different cases.

5. Its limitations are few and it should be given a high priority in general anesthesia.

6. It is a safe and non toxic drug.

---

1. Stoelting, V. K.: The Use of a New Intravenous Oxygen Barbiturate 25398 for Intravenous Anesthesia (A Preliminary Report), Anesth. & Analg. (Cleveland), 36:49, 1957.

2. Redish, C. H., Vore, R. E., Chernish, S. M., and Gruber, C. M.: A Comparison of Thiopental Sodium, Methitural Sodium, and Methohexital Sodium in Oral Surgery Patients, Oral Surg., 11:603, 1958.

3. Friedman, Emerich: Methohexital Anesthesia in Electrocerebral Therapy, Disease of Nervous System, monogram supplement, Vol. 20, 121: 124, May 5, 1959.

4. Egbert, L. D., Oech, S. R., and Eckenhoff, J. E.: Comparison of the Recovery from Methohexital and Thiopental Anesthesia in Man, Surg. Gynec. & Obst., 109:427, 1959.

5. Bellville, J. W., Fennel, P. J., Murphy, T., and Howland, W. S.: The Relative Potencies of Methohexital and Thiopental, J. Pharmacol. & Exper. Therap., 129:108, 1960.

6. Douglas, M. H.: A New Intravenous Barbiturate for Pediatric Anesthesia in Difficult and Handicapped Dental Patients, Anesthesiology, 13: 686, 1960.

7. Schumacher, M. J.: Brevital Sodium for Basal Anesthesia in Pediatrics, J. Am. A. Nurse Anesthetics, 30:283, 1962.

8. Marshall, J. R.: Human Antepartum Placental Passage of Methohexital Sodium, Obst. & Gynec., 23:589, 1964.

9. Lee, P. F. S.: Methohexital Anaesthesia in Caesarean Section, Acta obst. et gynec. Scandinav., 44:458, 1965.

10. Lemburg and Costellanos: Cardioversion, Journal of Florida Medical Association, 52, 21-24, Jan. 1965.

11. Sunshine, I., Whitwam, J. G., Fike, W. W., Finkle, B., and LeBeau, J.: Distribution and Excretion of Methohexitone in Man. A Study Using Gas and Thin Layer Chromatography, Brit. J. Anaesth., 38:23, 1966.

12. Brevital[RX] is the trade name of Methohexital marketed by Eli Lilly, Co., Indianapolis, Ind.

Otitis Externa: Treatment Using A New Expandable Wick

John Segrest Taylor, M. D.
Mobile, Alabama

Summary

An expandable wick made from Weck cell sponge can be easily introduced into the outer ear even if completely occluded by edema of the canal wall. This greatly facilitates the treatment of severe otitis externa cases. After warmed aqueous-based drops, e.g. Vasocidin, are placed on the wick, the expanded material will then accept any otic drops depending on the physician's choice.

Otitis externa has been called many names by doctors and patients alike but none of these oft times unpleasant terms need be repeated here. An abbreviated outline of the various conditions causing irritation of the external canal is presented:

1. Infectious:
   a. Bacterial
   b. Fungal
   c. Viral
      Herpetic
      Bullous myringitis
2. Traumatic:
   a. Iatrogenic
   b. Q-tips, etc.
3. Dermatoses:
   a. Seborrheic dermatitis
   b. Eczematous dermatitis
   c. Psoriasis
   d. Lupus erythematosis, etc.
4. "Malignant" external otitis of diabetics

In many instances, it is difficult to determine whether an underlying condition is present until the initial treatment has been instituted to control the acute symptoms. This paper presents one suggested regimen that can be utilized to greatly facilitate the initial treatment phase.

No mention is made in the recent literature of the severe pain the patient frequently experiences when any type of cotton wick is forced into a small edematous external canal. This can be a very traumatic experience and the patient may be quite reluctant to return for another such treatment. However, a readily available Weck cell ear wick can be inserted into almost any infected external canal with very little discomfort. Only one of approximately 120 patients thus treated complained of more than slight discomfort when this wick was used. The main difference seems to be that this material is stiff enough to find its way through the swollen external canal without any splinting forceps around it and without excessively traumatizing the closely adherent edematous tissues. It should be inserted its full length with just the outer tip visible.

This wick as pictured below, can be obtained from Ed Wick and Co., or can be made from Weck cell eye sponges, or Gardlok nasal splints. After insertion, aqueous-based drops, e.g. Vasocidin, are instilled to allow expansion of the wick and frequently, at this point, the patient may state that the pain is partially relieved. The physician may then prescribe his preference of otic drops to keep the wick moistened and thus allow adequate access of medication into

the deep recess of the swollen external canal. It is important to use an aqueous-based otic preparation at first as ointments, alcohol, and oily preparations will not cause this material to expand. Further, a little ointment may be placed on the tip for lubrication if desired. After expansion, the spongy material may be penetrated by either type of drops, i.e. aqueous-based or oily preparations. I have found Vasocidin ophthalmic-Otic drops and Chloromycetin Otic to be especially helpful. After three or four days the wick may be removed easily with forceps.

In the resistant cases, culture and sensitivity studies may be desirable as well as blood sugar tests, and dermatological consultation. These need not be obtained initially because by the time results are available the patient is usually well on the road to recovery.

In those patients prone to recurring attacks, patient education is a must. It is suggested that they keep out water *by plugging* their ears with Vaseline on cotton balls before showering, shampooing, or getting water around the ears. If water does manage to creep in somehow, they can use a mixture of white vinegar and rubbing alcohol (equal parts) provided no perforation of the tympanic membrane is present. McLaurin presented another excellent preventative measure several years ago, which is currently very difficult to obtain, and that is Silicone-200 Drops every other day to water proof the canal before exposure to water, eg. in competitive swimmers.

If possible, initial cleansing of the external canal by suction is desirable but need not be done until the canal can be adequately visualized. Several articles reported "cleansing" using cotton tipped applicators and irrigating with saline solutions, but these may be quite traumatic initially. Furthermore, the patient may be led to believe that applicators should be used to cleanse his ears and in my opinion they are definitely contra-indicated.

Most articles reviewed suggest that pseudomonas, streptococcus, staphylococcus, etc. which are normal flora of the ear canal are also frequent consative agents in otitis externa. The most common consative factor in external ear infections is trauma to the skin either from maceration by retained water or discharge, or from Q-tips, bobby pins, etc. allowing weeping of the skin furthering ingrowth of micro-organisms and a change in the acid p^H of the canal.

Regardless of the etiology, the majority of these conditions will respond favorably initially if the suggested regimen is followed. For those resistant cases, culture and sensitivity is definitely indicated and appropriate therapy should be instituted. Further questioning in these cases may also reveal that the patient is still swimming, skiing, or getting his ears wet from excessive perspiration. Healing may also be delayed by the patients wearing hearing aid, ear molds before allowing adequate time for healing.

Fungizone (50 mgm. vial) suspended in Vasocidin Otic drops has been especially helpful in clearing resistant fungus infections that seem to persist after the acute bacterial reaction has subsided.

This article was written in the hope that others would find this material very useful also. The procedure presented should prove to be an easier, less painful method of handling the acute phase of external otitis.

Elia, J. C.: Practical Treatment of Otitis Externa, Maryland State Med. J., Oct. 1963, p. 501

Shapiro, S. L.: Some Remarks on Otitis Externa, The E. E. N. T. Monthly, 52, Aug. 1973, p. 61

Senturia, Ben H.: Diseases of the External Ear, Chas. C. Thomas, Springfield, Ill., 1957

Holland, J. W.: Acute Otitis Externa, J. Med. Soc., N. J., 59:9, Sept. 1962, p. 506

Khambata, A. S.: Ear Dressings in the Treatment of Otitis Externa, The Practitioner 202, Feb. 1969, p. 269

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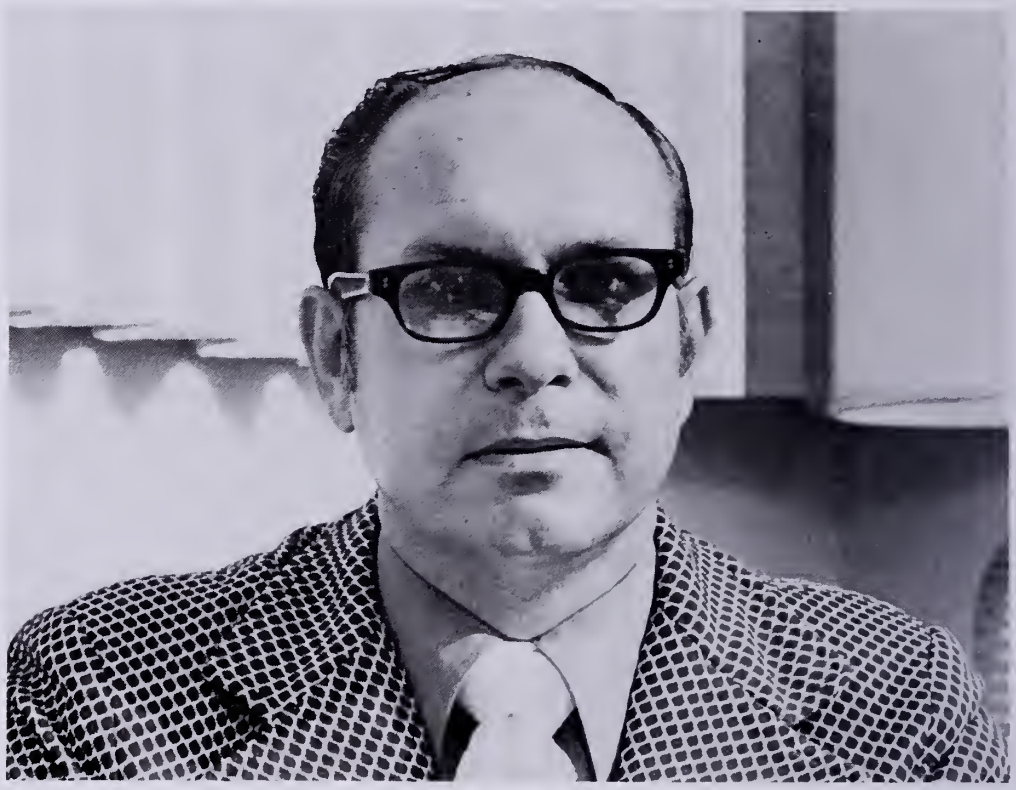

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CONTINUING MEDICAL EDUCATION

Excerpts from Speech Given by Dean Pittman

Larry Dixon

The increasing demand for continuing medical education among practicing physicians is prompting medical schools to place increased emphasis on the need for doctors to constantly "keep current."

The following excerpts from Dean James A. Pittman's welcoming address to incoming University of Alabama medical students indicates the awareness of the importance of continuing medical education.

Dr. Pittman's remarks are exceedingly meaningful when doctors pause to realize how rapidly medicine is changing and how quickly the latest innovations can be lost to those who fail to keep current. That is the attitude which the farsighted dean is trying to instill at the University of Alabama School of Medicine.

"I would like to illustrate this morning some of the changes now coming in the system of medical education and practice which will affect you in your attempt to serve the patient. . . . The greatest change will simply be an actualization of something we have been talking about for years: continuing education throughout the life of the physician. Medical educators have for many years said that the most important thing they taught was not the facts themselves (even though this is what most tests attempt to evaluate), but how to learn—that is, teaching the learning process itself.

"One thing which is forcing this change is increased consumerism. The public, rightly or wrongly, perceives some doctors as more interested in their own pocketbooks than in the patient; and this has stimulated demands for cost controls and quality controls on practice, which has in turn stimulated not only demands for cost controls on the doctors themselves, but also tremendously increased interest in continuing education. This is seen now in medical knowledge self-assessment examinations, which are offered from a variety of sources, including some commercial sources, and which tell the doctors (who voluntarily take them) where their weaknesses are. Some specialty organizations, such as the Academy of Family Practice, certify their diplomates for a limited time only, after which they must submit to re-examination in order to remain certified. The state medical society in Oregon expelled 19 physicians last year for failing to keep up with their own continuing medical education. The future here seems clear: continuing education—your own education of yourself for as long as you remain a clinician—will be a way of life. And society and your medical colleagues will call upon you repeatedly to prove that it is your way of life, your permanent 'life style.'

"This is not bad, in my estimation, though I dislike the idea of having to prove everything to everybody these days. And I don't think most doctors are the undeserving money gluttons they're sometimes accused of being. However, the physician's life should be the life of a scholar. And surely you are up to it. You have been selected from a large group of applicants—less than 10 per cent of the applicants to this school were admitted last year, and these applicants—all of them—were in general a very scholarly, able group of people. (The nation-

(Continued on Page 470)

The irritations of man's day are often reflected in his gut.

The causes of irritable colon and the diarrheal symptoms that often accompany it can be as diverse as the systemic and emotional irritations man is faced with daily.

Although the mucoid nature of stools and the occurrence of diarrheal episodes coincident with times of emotional stress may be valuable clues to the functional nature of the disorder, irritable colon must often be diagnosed by exclusion. Such diagnostic exploration takes time. Discovery of the nature of any emotional problems may take more. During that time, Lomotil® is an ideal agent for controlling diarrheal symptoms.

Lomotil tablets are small, easy to carry and easy to take. They act promptly and effectively. Secondary effects are relatively infrequent and, once the first force of the diarrhea is controlled, maintenance is frequently effective on as little as one fourth of the initial dosage.

These same characteristics make Lomotil useful in controlling the diarrhea associated with gastroenteritis, antibiotic therapy and acute infections.

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(Warning: May be habit forming)
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takes care of the gut issue in irritable colon

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Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria and paralytic ileus.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. Use a narcotic antagonist in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. *Liquid,* 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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Status Report: Abortion

The office of the Medical Association has recently received several requests of private practitioners concerning the status of the Alabama laws on abortions.

The subject of abortions is covered in two separate sections of the *Alabama Code*. The first and most widely known is the Criminal Abortion Statute in Title 14, Section 9. The lesser known is Title 46, Section 270 of the Medical Practice Act which makes a conviction under the Criminal Abortion Statute a ground for revoking a physician's certificate of qualification to practice medicine.

A detailed analysis of the two statutes is unnecessary because the recent Supreme Court's decisions of *Roe* v. *Wade* (41 Law Week 4213) and *Doe* v. *Bolton* (41 Law Week 4233) declares the Alabama Criminal Abortion Statute unconstitutional. The *Roe* case states that relative to the first trimester of pregnancy the decision to abort is between the woman and her physician and this decision is not subject to regulation by the state.

In both decisions the United States Supreme Court separated the stages of pregnancy and made the following distinctions as to the constitutional rights involved in each stage.

I. For the stage prior to approximately the end of the first trimester, the abortion decision and its effectuation must be left to the medical judgment of the pregnant woman's attending physician.

II. For the stage subsequent to approximately the end of the first trimester, the State, in promoting its interest in the health of the mother may, if it chooses, regulate the abortion procedure in ways that are reasonably related to maternal health.

III. For the stage subsequent to viability the State, in promoting its interest in the potentiality of human life, may, if it chooses, regulate and even proscribe, abortion except where necessary in appropriate medical judgment for the preservation of the life or health of the mother.

Many physicians are of the opinion that because of the Supreme Court rulings they are now required to participate in an abortion procedure simply upon the request of the pregnant woman. This line of thinking is completely erroneous. The Supreme Court specifically recognized the right of a physician to refuse to participate in abortions. In the *Doe* case the Supreme Court said:

> "A physician who shall state in writing an objection to such abortion on moral or religious grounds shall not be required to participate in the medical procedures which will result in the abortion and the refusal of any such person to participate therein shall not form the basis for any claim or damages on account of such refusal or for any disciplinary or recriminatory action against such person."

The converse of the above is when a physician chooses to accommodate the request of a woman and proceeds to perform the abortion. The logical question is what should the physician do to protect himself?

Actually a physician should proceed with the abortion just as he would with any other procedure. He should insure that the woman understands the nature of her request and explain all of the medical risks involved. It is strongly recommended that the conference between the physician and the woman include the woman's husband. It is also recommended that the request by the woman and her husband for the abortion be reduced to writing with a statement by them that they fully understand the nature of the operation and the attendant risks.

MEDICO - LEGAL DIALOG

THE LOCALITY RULE

M. Roland Nachman, Jr.
President, Alabama State Bar Association

The locality rule has ancient origins in the law. In earlier times, a physician was bound to possess only the skill which physicians and surgeons of ordinary ability and skill practicing in similar localities with opportunities for no larger experience, ordinarily possess. And, negatively, a physician was not bound to possess that high degree of art and skill possessed by eminent surgeons practicing in large cities and making a specialty of the practice of surgery.

The initial development of the locality rule revealed judicial awareness that physicians in small or rural communities, in the normal nature of things, will lack opportunities to keep abreast of the advances of the profession and will not have the most modern facilities for treating patients. The several courts which adopted this locality rule recognized an unfairness in holding the country doctor to the standards of doctors practicing in large cities. And, the courts attempted to make—as common-law courts often attempted to make in many and varied contexts—a practical adjustment to the needs of the time—in this instance a time when many small communities were dependent upon the services of a doctor who had limited equipment and limited opportunities to inform himself of the advances in the science of medicine.

But, this judge-made adjustment had offsetting disadvantages—unfortunate results which, as we shall see, have persuaded courts in recent times to make substantial changes in the locality rule, and in some instances to abandon it altogether. An aplication of the rule obviously meant that if competent doctors predominated in any small town or rural area, these incompetent doctors set the legal standards of medical skill in the community in any malpractice case which might be brought. And, indeed, to compound this unfortunate result, there were no legally admissible comparative practices against which to demonstrate the ineptness or to encourage improvement through the threat of legal sanctions. Moreover, since outside medical standards were not admissible under this rule, the very witnesses themselves would be physicians who had in the aggregate set the low standards of medical skill.

I shall examine in some detail a few leading cases which have decreed a change in the locality rule. Their reasons, generally, have been the modern availability of medical journals, information regarding drugs from manufacturers and others, postgraduate courses, and other forms of continuing education which now assure that many of the most recent advances can be used easily and readily by all physicians wherever they may practice. Moreover, the existence of national specialty boards and their publications have assisted in the establishment of nationwide standards for medical specialists. Accordingly, recent decisions have eliminated the locality rule for specialists while retaining it for the general practitioner; others have eliminated the rule altogether.

In a far-reaching recent case,[1] when Mrs. A gave birth at a hospital in New Bedford, Massachusetts, Dr. B, an anesthesiology specialist, gave her a spinal injection of eight milligrams of pontocaine—an anesthetic. Although this dosage of the drug was shown at the trial to be customary in New Bedford, five milligrams or less was the amount recommended by the manufacturer and normally used elsewhere. As a result of the higher concentration, Mrs. A's

left leg was partially paralyzed, and she brought a malpractice suit against Dr. B.

Mrs. A's lawyer had requested a charge to the jury that the doctor owed her "the duty to have and use the care and skill commonly possessed and used by similar specialists in like circumstances."

The trial judge refused to give this charge and instead charged the jury:

> " '[The defendant] must measure up to the standard of professional care and skill ordinarily possessed by others in his profession in the community, which is New Bedford, and its environs, of course, where he practices, having regard to the current state of advance of the profession. If, in a given case, it were determined by a jury that the ability and skill of the physician in New Bedford were fifty per cent inferior to that which existed in Boston, a defendant in New Bedford would be required to measure up to the standard of skill and competence and ability that is ordinarily found by physicians in New Bedford.' "

Acting under these instructions, the jury returned a verdict for the doctor. On appeal, the Supreme Judicial Court of Massachusetts reversed the case and held that the trial judge had erroneously refused to give the charge requested by the plaintiff and had compounded his error by giving the charge which he did. In the course of its decision, the Massachusetts high court, for the following reasons, overruled its earlier decisions which had enunciated and applied the so-called "locality rule."[3]

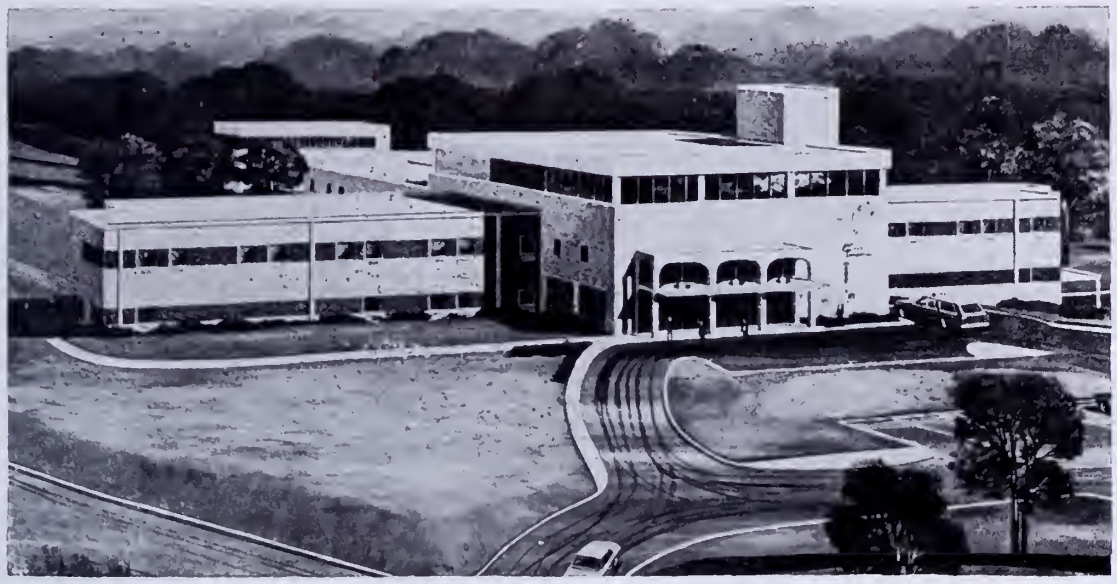
> "The time has come when the medical profession should no longer be Balkanized by the application of varying geographic standards in malpractice cases. * * * The present case affords a good illustration of the inappropriateness of the 'locality' rule to existing conditions. The defendant was a specialist practicing in New Bedford, a city of 100,000, which is slightly more than fifty miles from Boston, one of the medical centers of the nation, if not the world. This is a far cry from the country doctor . . . who ninety years ago was called upon to perform difficult surgery. Yet the trial judge told the jury that if the skill and ability of New Bedford physicians were 'fifty percent inferior' to those obtaining in Boston the defendant should be judged by New Bedford standards, 'having regard to the current state of advance of the profession.' This may well be carrying the rule . . . to its logical conclusion, but it is, we submit, a reductio ad absurdum of the rule."

Moreover, the court proceeded to enunciate the broadest kind of reversal of the locality rule—eliminating it for general practitioners and not limiting the reversal simply to specialists as some of the earlier cases had done. The Massachusetts rule henceforth is:

> "The proper standard is whether the physician, if a general practitioner, has exercised the degree of care and skill of the average qualified practitioner, taking into account the advances in the profession. In applying this standard it is permissible to consider the medical resources available to the physician as *one* circumstance in determining the skill and care required. Under this standard some allowance is thus made for the type of community in which the physician carries on his practice." (Emphasis by the Court.)[4]

The Massachusetts story—relating to doctors—has been duplicated in Illinois in a far reaching decision relating to hospitals as well as doctors.[5] On November 5, 1960, plaintiff, who was 18 years old, broke his leg while playing in a college football game. He was taken to the emergency room at the Charleston hospital and treated by Doctor A, with the assistance of hospital personnel. The treatment consisted of applied traction and the placing of the leg in a plaster cast. A heat cradle was applied to dry the cast.

(Continued on Page 454)



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(Continued from Page 452)

Not long after the application of the cast, plaintiff was in great pain; and his toes, which protruded from the cast, became swollen and dark in color and eventually turned cold and insensitive. On the evening of November 6, Dr. A "notched" the cast around the toes, and on the afternoon of the next day he cut the cast approximately three inches up from the foot. On November 8 he split the sides of the cast with a stryker saw. In the course of cutting the cast the plaintiff's leg was cut on both sides. Blood and other seepage were observed by the nurses and others, and there was a stench in the room, which one witness said was the worst he had smelled since World War II. The plaintiff remained in Charleston Hospital until November 19, when he was transferred to Barnes Hospital in St. Louis and placed under the care of Dr. B, head of orthopedic surgery at Washington University School of Medicine and Barnes Hospital. Dr. B found that the fractured leg contained a considerable amount of dead tissue which in his opinion resulted from interference with the circulation of blood in the limb caused by swelling or hemorrhaging of the leg against the construction of the cast. Dr. B performed several operations in a futile attempt to save the leg but ultimately it had to be amputated eight inches below the knee.

Both the hospital and Dr. A were sued for alleged negligent medical and hospital treatment; the doctor settled for $40,000; and a jury returned a verdict against the hospital in the sum of $150,000 which was reduced by $40,000. The appellate court affirmed the judgment for $110,000.

The sweep of the *Darling* decision is broad in several important aspects. The court held that a jury could properly have found from the evidence that the hospital "failed to have a sufficient number of trained nurses for bedside care of all patients at all times capable of recognizing a progressive gangrenous condition of the plaintiff's right leg, and of bringing the same to the attention of the hospital administration and to the medical staff so that adequate consultation could have been secured and such conditions rectified. . . ."[6]

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The court also held that a jury could have properly found "that the hospital failed to require consultation with or examination by members of the hospital surgical staff skilled in such treatment; or to review the treatment rendered to the patient and to require consultants to be called in as needed."[7] The enmeshed legal duties, the court held, are several:[8]

> "On the basis of the evidence before it the jury could reasonably have concluded that the nurses did not test for circulation in the leg as frequently as necessary, that skilled nurses would have promptly recognized the conditions that signalled a dangerous impairment of circulation in the plaintiff's leg, and would have known that the condition would become irreversible in a matter of hours. At that point it became the nurses' duty to inform the attending physician, and if he failed to act, to advise the hospital authorities so that appropriate action might be taken. As to consultation, there is no dispute that the hospital failed to review Dr. A's work or require a consultation; the only issue is whether its failure to do so was negligence. On the evidence before it the jury could reasonably have found that it was."

The *Darling* decision is noteworthy, moreover, in its potential change of the standard of care to which hospitals, and those who treat in them must adhere. Alabama cases have heretofore spoken of the legal duty of care as being that customarily offered by hospitals generally in the community. But, this test was vastly broadened by the Illinois Court in *Darling*.[9] And, it did so by resorting in part to the regulations adopted by the State Department of Public Health under the Hospital Licensing Act of Illinois; to Standards for Hospital Accreditation of the American Hospital Association; and to the bylaws of the defendant hospital. These

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regulations, standards, and bylaws which were introduced into evidence by the plaintiff, in the view of the court, "aided the jury in deciding what was feasible and what the defendant [hospital] knew or should have known."[10]

Moreover, even the question of custom—which the court equates with a community standard—is not conclusive on the jury or on the courts. Quoting Judge Learned Hand in *T. J. Hooper*, 60 F. 2d 737, 740, the court stated:

> " 'There are, no doubt, cases where courts seem to make the general practice of calling the standard of proper diligence; we have indeed given some currency to the notion ourselves. * * * Indeed in most cases reasonable prudence is in fact common prudence; but strictly it is never its measure; a whole calling may have unduly lagged in the adoption of new and available devices. It never may set its own tests, however persuasive be its usages. Courts must in the end say what is required; there are precautions so imperative that even their universal disregard will not excuse their omission.' "

Cases in Iowa[11] and Washington[12] have retained the locality rule only for general practitioners and have abandoned it for specialists.

The Alabama cases, in terms, continue to apply the general test laid down many years ago:[13]

> "In operating upon or treating a patient, a surgeon's duty is to bring to the service and to exercise such reasonable care, diligence and skill as physicians and surgeons in the same general neighborhood, in the same general line of practice, ordinarily have and exercise in a like case. Neither a physician nor a surgeon is an insurer of the successful issue of his treatment or service."

The test for hospitals, too, continues to speak of the "community":[14]

> "The measure of duty owed by a hospital to a patient is that degree of care, skill, and diligence used by the hospitals generally in the community and by the express or implied contract of the undertaking."

Moreover, the Alabama Supreme Court has recently held that proof of negligence may not be proved by simply showing an unfortunate result and relying on the doctrine of *res ipsa loquitur*. Expert testimony is required as proof of what is or is not proper practice, treatment or procedure.[15]

Alabama courts thus have not rejected the locality rule, and indeed, it is possible to argue that the articulation of the standard of care in very recent cases uses the same locality rule language which appeared in Alabama cases decided many years ago. But, the Supreme Court has not had occasion to consider and decide the policy arguments which were meaningful to the Massachusetts court and which caused a decision to reverse the earlier test. Prudent medical practice surely dictates an awareness that Alabama, too, may depart from the locality rule.

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1. Brune v. Belinkoff, 235 N. E. 2d 793 (Mass. 1968).
2. 235 N. E. 2d at 793.
3. 235 N. E. 2d at 798.
4. 235 N. E. 2d 798.
5. Darling v. Charleston Memorial Hospital, 33 Ill. 2d 326, 211 N. E. 2d 253.
6. 211 N. E. 2d at 258.
7. Ibid.
8. 211 N. E. 2d at 258.
9. 211 N. E. 2d at 257.
10. Ibid.
11. McGulpin v. Bessemer, 241 Iowa 1119, 1132, 43 N. W. 2d 121, 128: "A physician or surgeon who is held out as a specialist is required to exercise that degree of skill and care ordinarily used by similar specialists in like circumstances, having regard to the existing state of knowledge in medicine and surgery, not merely the average skill and care of a general practitioner."
12. Pederson v. Dumouchel, 72 Wash. 2d 73, 431 P. 2d 973.
13. Orange v. Shannon, 284 Ala. 202, 206, 224 So. 2d 236. See also, Cooper v. Providence Hospital, 272 Ala. 283, 285, 130 So. 2d 8.
14. Underwood v. Holy Name of Jesus Hospital, 289 Ala. 216, 221, 266 So. 2d 773. See also, Parrish v. Spink, 284 Ala. 263, 266, 244 So. 2d 621.
15. Berry v. Robertson, 285 Ala. 623, 235 So. 2d 665, 664.

A Glimpse of Disease In Southern India

Dr. M. Govindaraj

During a visit to India last year I met Dr. Govindaraj, Chief of Medicine at the Hospital of the Calicut Medical College. I was amazed at the variety of medical illnesses being treated there and I asked Dr. Govindaraj to provide the physicians of Alabama with an insight to medical practice in that changing culture.

—George C. Risman, M. D.

Calicut, a town of three hundred thousand, is located on the southeast coast of India. It is both young and old; young, having been "discovered" by Vasco da Gama in 1496; old, since monuments older than one thousand years are found in the vicinity. As in other Indian cities, medicine has been practiced here for at least a millenium. Following the British conquest in the seventeenth century, modern technics were introduced beyond the indigenous type of Indian medicine. However, not until Indian independence in 1947 was the organization and delivery of medical care widely disseminated. Since then, many medical colleges have been organized, numerous hospitals built, and a system of free governmental care instituted. Like the British system, however, a large nucleus of private medical care parallels the government program.

Kerala, the state in which Calicut is located, is one of the smaller Indian states, being a strip of land between the Arabian Sea on the west and the western Ghats (mountain range) on the east. The land is fertile with about one hundred inches of rain annually, most of which occurs during the months of June, July, and August. Apart from the monsoon months, the weather is generally hot, somewhat humid and summer temperatures are often in the mid-nineties. From November to March the weather is cool and more temperate. Unlike many other areas of India, however, literacy is quite high.

Medical services are provided by private general practitioners, physicians practicing in government-controlled hospitals, and a few widely dispersed missionary hospitals subsidized by foreign denominational groups. Physicians working for the government, of course, are on federal pay, while those in private practice operate on a fee for service principle. About ninety per cent of the hospitals are government controlled and are completely free—like the charity or municipal hospitals in the United States. Private physicians do own a small percentage of the institutions and perform their services therein. Largely however, private physicians do not treat hospital cases.

The Medical College Hospital of Calicut, resting on a picturesque hilltop, boasts a bed strength of one thousand and attracts patients from a fifty mile vicinity. The outpatient departments function in the morning hours six days a week and appointments are unnecessary. The casualty (emergency) room is open after clinic hours and here, nonemergency illnesses are also treated. Services rendered in the emergency room are free but prescriptions are obtained from outlying, private pharmacies. On the other hand, while charges for hospital-care, physicians' fees, and drugs are free for inpatients, the availability of drugs in the hospital varies from time to time depending on budgetary appropriations. Accordingly, inpatients are frequently asked to purchase certain pharmaceuticals from the outside which are not current in the hospital pharmacy. These are then administered by the nursing staff under the physicians' orders.

The Department of Medicine has six main and a few specialty units. Each of the former has one male ward of thirty beds and a female ward of fifteen beds. The staff consists of a unit chief, his three assistants and three or four house doctors. Each unit

has its outpatient program on a particular day of the week so that admissions are made on that day each week. Outpatient clinics open at 7:30 A. M. and are manned by the house staff and students. They usually end by 1:00 to 2:00 P. M., and by this time about two to four hundred patients may have been seen on an average day.

As a result of increasing education, the importance of good medical care has attracted many. Unfortunately, budgetary allowances have not kept pace with the growing influx of patients demanding these improved services. Consequently, overloading of the bed capacity is frequent and overwork of the hospital staff usual. Sometimes floor mats are required to accommodate all the significantly sick patients who require hospitalization. The job following admission, of course, is to document, investigate, treat and dispose of patients in as prompt a fashion as is realistic. Under such a system the tendency towards emphasizing the organic as opposed to functional ailment does tend to occur, but nevertheless, time, space, and energy are made available to the latter. In addition, there is a heavy emphasis on clinical diagnosis rather than on sophisticated but time-consuming laboratory tests.

The clinical material in the outpatient clinics and wards is overwhelming. The variety is stimulating while the numbers are exasperating. The most common system affected, perhaps, is the respiratory despite the presence of few industries and little pollution in Kerala. There is a multiplicity of asthmatics who approach cyanosis and shock in the full blown condition. Lobar pneumonia of many different etiologies is frequently seen and students acquire excellent diagnostic skill by following the classical manifestations of pneumonia in these individuals. Rigor in the clinic, dull-

(Continued on Page 463)

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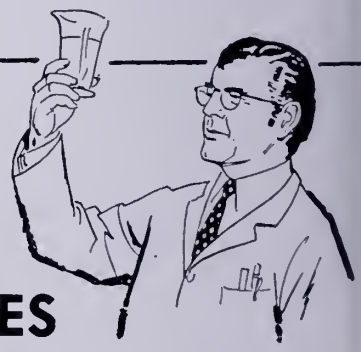

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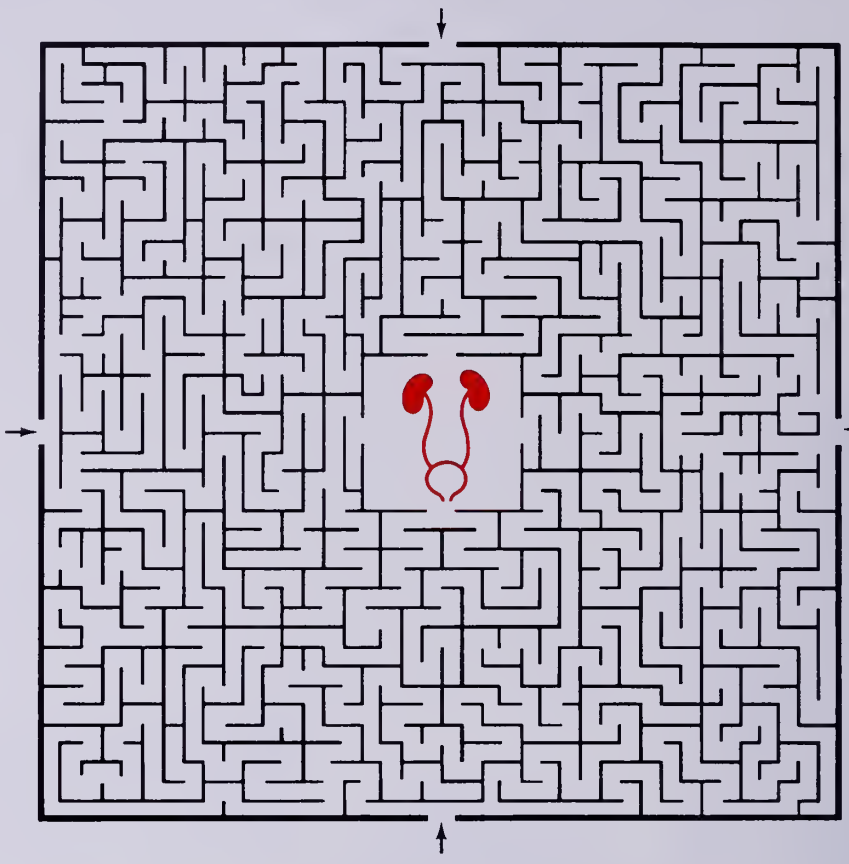
Basics in the treatment of urinary tract infection

Short-term therapy is no shortcut



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The case for adequate length of therapy

In the insidious, common and often stubborn urinary tract infections, duration of therapy is not standardized. Because renal damage in many patients is believed to result from repeated urinary tract infections in childhood, one pediatrician has stated that a rational approach to treatment includes more than a perfunctory prescription of an antibacterial agent.[1]

The first 48 hours and after...

To ensure adequate therapy, one expert[2] proceeds as follows: an initial culture and one after 48 hours. If the antibacterial used has been effective, the urine will be clear of pathogens after 24 to 48 hours. However, urine should be recultured and any persistence of original pathogens indicates that another drug be used. On the other hand, if urine is found to be sterile, the same drug is continued for two weeks. Then urine is recultured starting a week after the last drug dose, and cultures are continued monthly for three months, then every three months for a year, and finally, every four months for several years.[2]

Another authority[3] notes that initial short-term therapy without careful follow-up can lead to trouble, as reflected by the high relapse rate. He treats an initial urinary tract infection with a sulfa drug after taking a urine culture. If *Escherichia coli* is found—and it is in 70 to 80 per cent of cases—he continues full dosage for 21 days. Five to 10 days after cessation of therapy, he recultures and takes a colony count. If urine is sterile, he recultures at three and six months.

Measurement of success

For success in the treatment of urinary tract infec the urine must be kept free of bacteria for prolonged pe ods until the focus of infection in the tissue has been er cated.[3] This may take months or years when the infect is chronic or persistent. Criteria for successful therapy a drug are regarded as absence of symptoms and abse of pyuria and bacteriuria.[3] One authority defines signif bacteriuria as a count of at least 100,000/ ml of the sa organism in two consecutive clean-voided urine sampl

The nature of the infection and the length of therapy

Long-term follow-up is essential, a clinician who treats recurrent infections for one to two years points Persistent, symptomless bacteriuria usually calls for u logic procedures to find the site of infection, because underlying abnormality predisposing to urinary tract i tion must be detected and corrected—otherwise thera futile.[5] Upper urinary tract infection generally require longer therapy than infection of the lower urinary trac

In acute, simple, first infections of a symptomati type, the pathogens are nearly always *E. coli* or *Proteu mirabilis*.[5]

References: 1. Normand, I. C. S.: *Practitioner, 204*:91, 1970. **2.** E. H.: *Hosp. Med., 4*:73, 1968. **3.** Lampe, W. T. II: *J. Am. Geriat Soc., 16*:798, 1968. **4.** Petersdorf, R. G., and Turck, M.: *GP, 32* 130, 1965. **5.** Benner, E. J.: *Med. Times*, 98:(2) 95, 1970.

The case for Gantanol® (sulfamethoxazole)

hts susceptible organisms most often plicated

Gantanol® (sulfamethoxazole) is effective against only susceptible strains of *E. coli* and *Proteus mirabilis* also of *Klebsiella-Aerobacter, Staphylococcus aureus* , less frequently, *Proteus vulgaris*—pathogens apt to be nd in the mixed bacterial flora of recurrent and chronic titis and/or pyelonephritis.

mpt antibacterial blood/urine levels

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o effective in certain nonobstructed onic and recurrent urinary tract infections

Nonobstructed chronic and recurrent cystitis or onephritis develops more commonly in the elderly and ilitated, and response to Gantanol (sulfamethoxazole) ten highly satisfactory. The usual precautions in onamide therapy should be observed, including ntenance of adequate fluid intake, frequent c.b.c.'s urinalyses with microscopic examination.

Make the therapy suit the infection

In most urinary tract infections the *b.i.d.* schedule will usually suffice, but therapy must be maintained long enough to ensure eradication of pathogens. Mounting evidence in current medical literature suggests a minimum of 14 days of continuous therapy.* Adequate treatment for a sufficient time may also help prevent possible kidney damage. Gantanol is generally well tolerated with relative freedom from complications. The most common side effects include nausea, vomiting and diarrhea. Prescribe Gantanol tablets or the pleasant-tasting suspension.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

In nonobstructed cystitis due to susceptible organisms

Gantanol® B.I.D. (sulfamethoxazole) Basic Therapy

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Please see following page for summary of product information.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. ***Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nod and L.E. phenomenon). Due to certai chemical similarities with some goitr gens, diuretics (acetazolamide, thiaz s and oral hypoglycemic agents, sulfor mides have caused rare instances of goiter production, diuresis and hypo cemia as well as thyroid malignancie rats following long-term administrati Cross-sensitivity with these agents m exist.

Dosage: Systemic sulfonamide re contraindicated in infants under 2 months of age (except adjunctively pyrimethamine in congenital toxopla mosis).

Usual adult dosage: 2 Gm (4 ta teasp.) initially, then 1 Gm *b.i.d.* or t depending on severity of infection.

Usual child's dosage: 0.5 Gm (or teasp.)/20 lbs of body weight initi then 0.25 Gm/20 lbs *b.i.d.* Maximur dose should not exceed 75 mg/kg/2 hrs.

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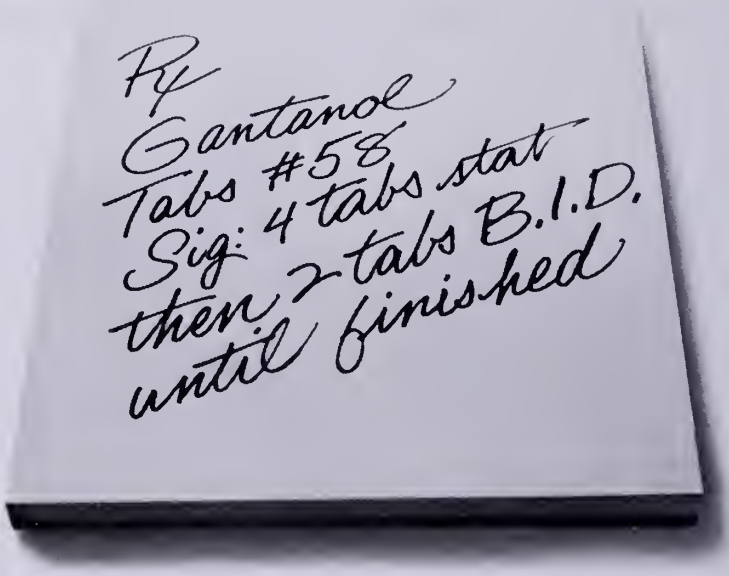

In nonobstructed cystitis due to susceptible organisms

Gantanol® (sulfamethoxazole) B.I.D.

Basic Therapy

(Continued from Page 458)

ness to percussion over the lung, bronchial breathing and bubbling crepitations is a commonplace pathogenesis and permits excellent instruction for undergraduate students. As expected, bronchiectasis is common and such cases are generally treated on an outpatient basis except for complications. Effusions and empyemas are "boring situations" even for the medical students; third year students can frequently diagnose such problems with ease. Hydropneumothorax occurs with undesirable frequency and shifting dullness and succussion splash are hallmarks which should not be missed. Lung abscess is common as is pulmonary tuberculosis with all its multiple clinical forms, which present a myriad of physical signs. Chronic bronchitis and emphysema are found, but proportionately less frequently than would be noted in the temperate climates of England and the United States. The frequency of bronchial carcinoma is distinctly less than in English-speaking countries although the incidence of smoking is high and the number of cigarettes consumed per diem large.

A frequent clinical manifestation will demonstrate marked toxicity, fever, right chest pain and slight jaundice. This would be rather obvious to our interns as amoebic hepatitis and liver abscess would be diagnosed while the patient was in the outpatient department. Aspiration of liver abscess is frequently performed and is ordered concomitantly with the request for a chest or abdominal x-ray. It is felt that delay may result in peritoneal, pleural or pulmonary spread. Tropical eosinophilia is also frequent and found to have a multiplicity of appearances, varying from an acute severe manifestation to a chronic form.

In the cardiovascular area, rheumatic valvular disease, ischemic heart disease, and hypertension are common. A visiting physician would see more mitral stenosis on the wards here in a month than possibly in a life-time in America. Multi-valvular lesions are pathetically frequent, as well. Opening snaps, pulsatile livers and collapsing pulses abound. Mitral stenosis in subteenage children rebuts the textbook recommendation when surgery is advised. Atherosclerosis and hypertension are also common, contrary to the western physicians' concept of their possible relationship to nutrition and fat ingestion. Cardiomyopathy is not uncommon nor is the aortic arch syndrome. Pericardial effusions and aortic aneurysms are occasionally seen. The late manifestations of syphilis, both neurological and vascular, are not unusual. Peptic ulcer, cirrhosis, and intestinal amebiasis form the bulk of abdominal problems by themselves and with their complications.

Carcinoma of the stomach is quite common in Kerala. Primary carcinoma of the liver is also not rare. Noncirrhotic, prehepatic portal hypertension is encountered now and then, its exact etiology being unestablished. Another interesting and to me a most fascinating syndrome is pancreatic diabetes, which occurs frequently in the younger age groups. It is manifested by elevated blood sugars and is correlated with extensive pancreatic calcification. This variety forms a substantial portion of diabetes in Kerala but seems less common elsewhere in India. Such individuals are insulin dependent, underweight, and often manifest severe abdominal pain—but seldom slip into Ketosis. Neurology in Calicut is a syndrome-hunter's paradise. Emergencies like meningitis, transverse myelitis, idiopathic polyneuropathy and encephalitis are commonplace. Motor neuron disease of the slowly progressive variety seen in the relatively young is a unique occurrence. Functional abnormalities, hysterical reactions and other psychiatric illnesses are as prevalent here as in the western countries. Over one hundred cases of tetanus are diagnosed and treated annually; although one imagines that many do not reach the hospital. The management of tetanus has resulted in a mortality rate of under thirty per cent in our units—which appears somewhat better than the mortality recorded in western literature. Apart from these entities there are numer-

ous instances of snakebite, occasional rabies, sporadic cases of cholera manifested by mild clinical courses and small incidence of malnutrition. Gross malnutrition is not nearly as common here as foreigners might imagine. Leprosy is, however, distressingly common—varying from a small patch to grotesque distortion. Hookworm and round worm abound as does pityriasis. Enteric fever is an every day complaint.

Some notable conditions that *do not* occur very often include disseminated sclerosis, Paget's disease of the bone, pernicious anemia, diabetic coma, Crohn's disease and infectious mononucleosis. Plague has essentially disappeared and malaria is rare.

There is no place, in my opinion, which can equal the manifestations of clinical disease like Kerala, although I have spent years in the British Isles. The emphasis in practice is upon physical diagnosis, the index of suspicion, and mental considerations of differential diagnosis. Laboratory and sophisticated tests play a secondary role when there are budgetary and fiscal considerations. Medical students may be somewhat less sophisticated in ordering and interpreting thyroid function tests, but are very competent in extracting the most from careful examination which permits them to arrive at the proper diagnosis possibly faster than waiting for complex laboratory testing. Evaluation of the skin, stool study, urine and sputum examinations by the laboratory are heavily emphasized and frequently facilitate correct diagnoses. The physician uses the microscope himself and it permits confirmatory diagnosis of many ailments, including tuberculosis, microfilaria, amebiasis, etc. Pulmonary function tests are not unknown but, unfortunately, the more definitive and sophisticated equipment is unavailable. X-rays are readily common but not as routinely ordered as they are elsewhere.

Much of this clinical approach, however, is changing albeit slowly. As I write these notes I know that in the ward above me an oscillograph is winking away in the coronary care unit. Some specialties are springing up and diagnostic facilities are expanding. Naturally, the overwhelming number of patients have curable diseases and the joy of seeing them improve and the gratitude they express elates us and maintains our spirits. An occasional disgruntled patient and the odd malingerer will, however, keep us on an even keel. Geriatrics and problems of senility usually do not pose a problem because of the strong family ties existing in Indian and Keralan society. Unlike the situation in England and America where care of the elderly does pose economic and medical problems, these individuals are carefully nourished and loved by their families and kept at home. On the other hand, because of these same strong family ties and Hindu funeral practices, the obtaining of autopsy material is exceedingly difficult.

It would be a pleasure to welcome any student interested in pursuing clinical studies to visit with us for a week or a month. We would be delighted to have any practicing physician who might be "passing by" to come and visit us for an exchange of views.

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Diagnostic Patterns In Disability In Alabama And The Nation

Robert E. Riederer, M. D.

Birmingham, Alabama

SYNOPSIS: This short statistical analysis of data compiled by the Social Security Administration shows the extent and nature of Alabama's participation in the social security disability program. It compares some of the State's data with national averages, and includes a comparison of worker disability allowances by diagnostic groups for Alabama and the United States overall.

Under the provisions of the social security disability program, the nation's largest disability plan, a worker under 65 can receive monthly benefits if he or she becomes unable to work due to a mental or physical impairment that has lasted—or is expected to last—at least 12 months or is expected to result in death.

More than 96 million workers can count on monthly cash benefits in the event of such severe and extended disability. In addition, the dependents of these workers are also eligible for monthly benefits. Over 1.8 million workers and 1.4 million dependents are now receiving disability benefits at the rate of almost $5 billion a year.

The latest year for which tabulated data is available showing disabled worker diagnostic patterns by State is 1970. Disabled workers in Alabama who began receiving benefits in that year constituted 7,281 of the 350,384 new beneficiaries nationwide.* The diagnostic patterns are not available, but determinations were made for 29,500 applicants in the fiscal year ending June 30, 1973.

For the year described, 41,217 disabled workers in Alabama were collecting $6,883,421 a month in benefits. In addition, 9,547 wives or husbands of disabled workers and 27,749 children of disabled workers in Alabama were receiving $488,856 and $1,261,985 respectively.*

Within these overall diagnostic groups, the most prevalent *primary diagnosis* in both Alabama and the nation in 1970 was chronic ischemic heart disease. Alabama recorded 1,648 cases that year. The nation's second most common primary diagnosis, schizophrenic disorders, accounted for 316 cases in Alabama. Following these, in order of decreasing national prevalence, was osteoarthritis and allied conditions, with Alabama reporting 492 cases, followed by emphysema with 390 cases. There were 232 cases of displacement of intervertebral disc in Alabama; 152 cases of diabetes mellitus and rheumatoid arthritis and allied conditions accounted for 216 cases in Alabama that year. Cerebrovascular disease, listed eighth among the most prevalent primary diagnoses in 1970, recorded 20 cases in Alabama; malignant neoplasm of trachea and lung 148 cases; and neuroses ranked tenth with 120 cases.*

Additional information about the social security disability program in Alabama can be obtained through the Disability Determination Unit, 2800 Eighth Avenue, South Birmingham, Alabama 35233.

*Source: Office of Research and Statistics Social Security Administration, H. E. W.

Robert E. Riederer, M. D., is Medical Consultant for the State Agency for Disability Determination Birmingham, Alabama.

around the state

Vital Statistics

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Bedney, Donald Lew, b 27, mc Stanford Univ. 71, recip. Georgia 72, 930 Franklin Street, Suite 101, Huntsville, Alabama 35801. GP.

Boyer, Lynn Brown, b 42, mc Mississippi 67, recip. Mississippi 72, 401 Lowell Drive, Huntsville, Alabama 35801. N.

Brown, Richard Allen, b 41, mc Georgia 70, recip. Georgia 73, 910 Franklin Street, Huntsville, Alabama 35801. GP.

Grant, Silas Winton, b 21, mc Univ. of Texas Medical Branch 46, recip. Texas 73, 6812 Criner Road, Huntsville, Alabama 35802. Administrative.

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Long, Franklin Howard, b 42, mc Alabama 69, recip. NBME 70, 1367 Government Street, Mobile, Alabama 36604. ObG.

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Battersby, Edward J., Madison ..... 533-07[illegible]

Bedney, Donald L., Madison ..... 533-56[illegible]

Bowen, Robert K., Jr., Colbert ..... 383-26[illegible]

Boyer, Lynn B., Madison ..... 539-41[illegible]

Brown, Richard A., Madison ..... 539-04[illegible]

Campbell, Henry A., Etowah ..... 547-88[illegible]

Cobb, Jeptha B., Mobile ..... 344-84[illegible]

Crenshaw, Francis M., Sumter ..... 392-53[illegible]

Dorris, Henry C., Mobile ..... 432-1[illegible]

Gilbert, Wendell N., Sumter ..... 392-55[illegible]

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(Continued on Page 473)

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(Continued from Page 447)

wide average acceptance ratio is 42 per cent.) So you should not be dismayed by the coming requirements for continuing medical education. You should just be aware of them."

Here Dean Pittman gave an explanation of what their formal education would consist of, followed by:

"In the past, this finished the physician's formal education. He was licensed and boarded for life. Too often it also finished his informal education. It has been particularly hard for doctors practicing in isolation to keep up, far from the stimulation of their colleagues. This 'professional isolation' is probably a major factor now pushing doctors away from solo practice and into groups and away from rural areas into cities. There they can often have better hospital facilities in which to practice, but they can also have continuing discourse with colleagues, weekly grand rounds, journal review clubs, and other teaching seminars. Obviously, ways are being sought to remedy this isolation. And Alabama leads in one respect—our MIST communications system.

"In 1969 the AMA established the 'Physicians Recognition Award' which any physician can obtain by documenting his own continuing education. This documentation can be obtained largely through such sessions as those I've just mentioned.

". . . As I mentioned before, various states and professional groups throughout the country are now requiring evidence of not only continuing education, but of continuing competence. Many feel that written exams cannot tell this, and 'Medical Audit' is a frequently discussed alternative. But whatever the mechanism may be, there is going to be increasing pressure on the physician in the future to periodically re-document his continuing competence, to prove that he is, in fact a lifelong scholar."

Rondomycin

(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule. 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR Information.

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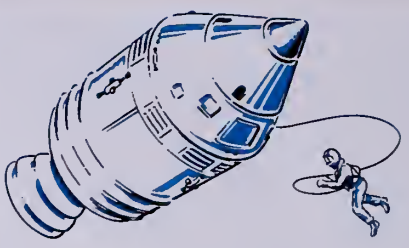

Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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THE JOURNAL
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President's Page

DR. CAMP

The Challenge Of Change

The year 1973 was most eventful. We saw several momentous crises affect our society —the Watergate scandal; the fuel crunch; the mideast war which seems to have come upon us without any advance warning; the indictment of the Vice President of the United States, and his subsequent resignation.

In reflecting on the results of these crises, especially the Watergate crisis, I believe that much good may come from the exposures which were made in the Watergate investigation. The American people have been informed for the first time in a clear and concise manner the corrupt way in which elections have been conducted for many years. This is the first time, however, that the average citizen has been made aware of this matter and in such a manner that there is no possible way to misunderstand the implications. We must find better ways in which to elect our public officials.

The fuel crunch is certainly going to have a very serious effect on our economy. Already thousands of people are out of a job, and it seems that the energy crisis is just the beginning. I am fearful that we are going to face much more expensive fuel costs during the next few years. This fuel shortage, too, has been involved with politics to some extent. The story here, when it finally comes to the forefront, is not going to be a very pretty one.

We physicians too have our problems. We have mentioned before that our real problem is too few physicians to take care of the enormous load which has been thrust upon us by the Medicare and Medicaid programs. Your President believes that the best possible answer to the above problem is a well integrated emergency medical transportation system. In the next few years I see no hope that we are going to persuade young physicians to go into small towns and carry on a first-aid type of practice such as many of us did in the past. I feel that the job of taking care of all the people of the United States can be carried out much better by transporting the patient to medical centers where there are adequate facilities to take care of the problem.

We have a really unsatisfactory problem in our fee schedule with the insurors. It has always seemed ridiculous to me that an operation in Birmingham should be worth 40 per cent more than an operation in some of the smaller cities of Alabama. I can see no reason for these differences in fees because of geographical areas. I find it very difficult to interpret fairly the "usual, reasonable and customary fee" for a specific service. Sometimes it is almost impossible to find out what constitutes a usual, reasonable and customary fee for certain rare operations, or for procedures which are not carried out on a day-to-day basis. I hope that the leadership in medicine will bring forth a more specific contract wherein the

(Continued on Page 482)

The Woman's Auxiliary

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Let No Woman Be Overlooked

"Let No Woman Be Overlooked" is the theme of a four-year nationwide drive by the American Cancer Society.

A major goal of the American Cancer society in its efforts to conquer uterine cancer is a Pap test for every woman 20 years or older to whom the test is applicable, and for women under 20 years who are considered high risks. It is hoped that this goal can be achieved by 1976.

This year 12,000 American women will die of uterine cancer. Each year approximately 43,000 new cases are diagnosed. Preventive measures are crucial with this form of cancer. By the time symptoms appear—such as irregular bleeding—cancerous cells already may have invaded healthy tissue. The Pap test signals the presence of cancer at a stage when it can be most easily cured.

Failure to have a Pap test is a needless health risk. The American Cancer Society has activated a National Task Force on Uterine Cancer Control charged with spearheading a nationwide effort to reach not only the middle-income woman but to deal with the fact that only 22 per cent of the women in low-income groups have been reached by current programs on uterine cancer.

The Alabama Division, Inc. of the American Cancer Society started its program with a kick-off brunch in Montgomery three months ago. Mrs. Robert Adams, President of the Montgomery Auxiliary of MASA attended this meeting and the Montgomery Auxiliary is making plans to help with record keeping and follow-ups. The seven other counties serving as a pilot program

MRS. GRADY

are Mobile, Jefferson, Dallas, Tuscaloosa Calhoun, Etowah and Madison. At a later date this program will include all the counties in Alabama.

Details of the Alabama program were discussed at this meeting by Mrs. George Wallace and Mrs. Loretta Bacon, Vice-President of the American Cancer Society, Alabama Division, Inc. Governor George Wallace has made two hundred thousand dollars available from the revenue sharing program for use in this program.

Other ideas presented by the Uterine Cancer Task Force of the American Cancer Society were to have PAP TEST billboards put up with a message "HAVE A PAP TEST IT'S A WOMAN SAVER," as well as spot

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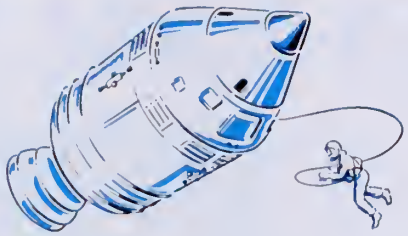

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Manufacturers of Ethical Pharmaceuticals

(Continued from Page 479)

insured, the insuror, and the providers are all made aware—in no uncertain terms—what their rights and privileges are as specified in the contract. I am satisfied in my own mind that this will eliminate many of the problems of physicians who are unhappy with the amounts they are receiving for their services. I see no real reason why a fee should be a top priority secret as it now seems to be. I hope the membership of this association will come forth with some suggestions to improve a nebulous situation which seems to be far from satisfactory to the parties concerned.

E. E. Camp, M. D.
President

(Continued from Page 480)

announcements on radio, TV and in the newspapers. It was suggested that services be set up for free pap test clinics, baby sitter services, transportation and also to encourage hospitals to include pap tests as a part of their regular examinations.

As doctors' wives, we have been asked by this committee to encourage participation in the pap smear campaign and to help with records and follow-ups with patients.

Betty Grady, President

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.
Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.
Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).
Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.
There is no experience in pregnant women who have received this drug.
Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.
Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.
Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.
CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)
Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.
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The film can be ordered from Ayerst Medical Information Services, Ayerst Laboratories, 685 Third Avenue, New York, New York 10017.

Available from the AMA's Motion Picture Library are: *Roentgen Anatomy of the Normal Bones and Joints.* It is a 19-minute B&W, 16mm film showing "Photography of the physical motion of the body and dissolves to cinefluoroscopy of the same parts of the body are combined to demonstrate the motions of the body joints."

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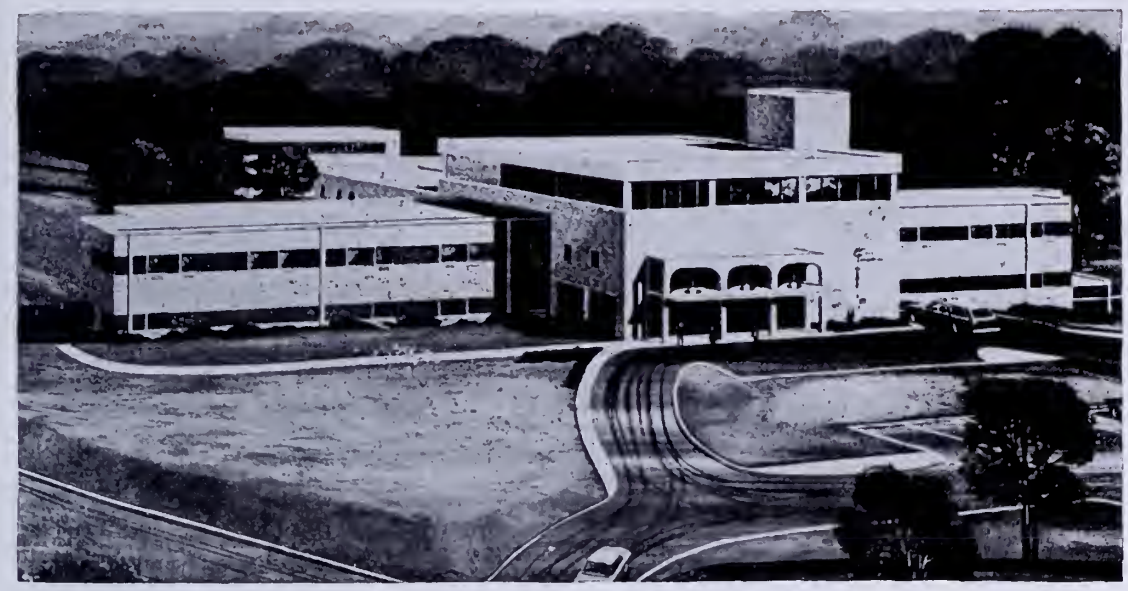
(Continued on Page 518)



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Birmingham Is Center For New Contraceptive Studies

A center for the study of population control is being developed at the University of Alabama-Birmingham's Medical Center. Funded by the Rockefeller Foundation and the World Health Organization, investigations are under way to develop new contraceptive methods. One of the projects is designed to establish a different type of delivery system for contraceptive compounds in current use, according to Dr. Charles Flowers, chairman of the Medical Center's Department of Obstetrics and Gynecology.

Unlike the pill, which is taken orally, this new system would utilize a long-acting injectable compound to control fertility. The contraceptive drug itself is surrounded by a kind of liquid envelope or membrane, developed by Dr. Herbert Polin, of Geneva, Switzerland. The envelope provides for a sustained release of the drug which enables the contraceptive material to last for long periods of time. Thus one injection may prevent conception for six months or longer.

Dr. Lee Beck, assistant professor in the Department of Obstetrics and Gynecology and principal investigator for this study, says the new delivery system is of particular importance in countries where the use of the pill is not feasible. This may occur in cultures whose people are not familiar with pill swallowing, and who are not likely to take a pill daily; or travel may be so hazardous that continuing family counseling is impractical. By contrast, he says, people in a number of underdeveloped countries often are familiar with various types of injections for immunizations and the like, and will accept them readily.

Drs. Beck and Polin explained that the new system will have other advantages over the pill. When a contraceptive pill is swallowed, the concentration of the drug entering the bloodstream must be initially higher than necessary because it dissipates and leaves the body quickly. Such levels of strong hormones may be responsible for the relatively large number of side effects reported by users of the pill. It is expected that the constant, lower level of the drug release possible with the Polin Membrane will alleviate side effects.

Needle Test Advocated In Suspected Breast Cancer

A needle aspiration test for suspected breast cancer provides almost immediate diagnosis, and thus can save many women from extended anxiety, two Philadelphia physicians say.

"Unfortunately, this simple procedure is not widely employed," said Dr. Tilde S. Kline, associate pathologist at Lankenau Hospital. She and Dr. Hunter S. Neal, assistant professor of surgery at Thomas Jefferson University medical school, reported at a recent meeting of the American Society of Clinical Pathologists and College of American Pathologists.

The aspiration method is simple—needle is inserted into a suspicious lump in the breast, suction is applied and a sample of tissue withdrawn. Whether the sample is benign or cancerous can be determined within an hour, Dr. Kline said.

But instead of getting the quick test—which is not new and is routine in Scandinavia—a woman usually faces a lag between the time a lump is found and a specimen is examined by a pathologist. During this period she "faces extreme anxiety—is the lump benign or malignant?" the investigators said.

In addition, because the specimen is ordinarily taken under general anesthesia in a hospital, if it proves malignant "many surgeons simply go ahead and do a mastectomy (breast removal) if prior permission has been given," the report said. "The result is to leave the patient to discover the presence of malignancy herself when she comes out of the anesthetic and finds that her breast has been amputated."

(Continued on Page 521)

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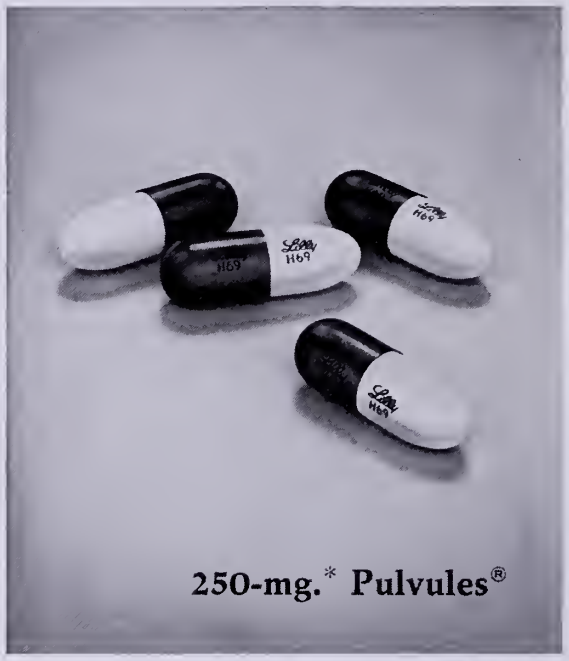

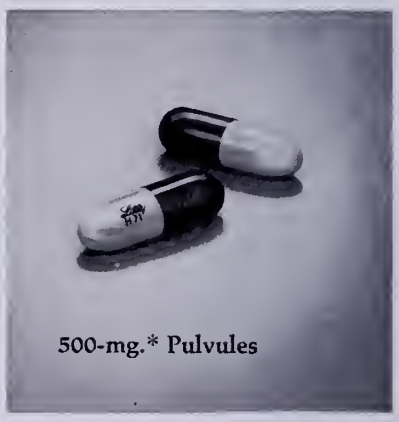

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Volume 43 February, 1974 Number 8

Gastric Emptying Rate As Measured By A Radioisotopic Technique

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Jerome R. Ryan, M. D., New Orleans, Louisiana
Roy Staub, M. D., New Orleans, Louisiana
J. R. Vargas, M. D., New Orleans, Louisiana

Summary

A modification of a non-invasive technique for measuring the rate of gastric emptying is described. Radiolabelled Sodium Chromate (200 yci) in a glucose solution was employed. The rate of isotope disappearance from the stomach, assessed by external counting was used to study the rate of gastric emptying. The method is simple, safe and provides information in a single test.

Eleven normal patients, eight patients with duodenal ulcer, two patients with gastritis and two patients with reactive hypoglycemia were studied.

Patients with peptic ulcer showed statistically significant lower values of gastric emptying time than those found in controls. Two patients with gastritis showed large values whereas the patients with reactive hypoglycemia showed low values of gastric emptying time.

The results were reproducible and in the range of those previously published with the original technique.

The importance of gastric emptying in physiology and several pathologic states has been long recognized; however, in clinical studies the available methods have made the measurement of this function complicated or unreliable.

Among the methods described to measure the rate of gastric emptying are:[1]

The measurement of the efflux through the pylorus. This can be done either by aspirating the duodenum through a nasoduodenal tube after administration of a marker or by measuring the rate of movement of nonabsorbable radiopaque material through the stomach.

Serial measurements of the volume of gastric contents. This can be done by withdrawing the gastric contents through a nasogastric tube or by successive radiograms of the stomach containing a radiopaque marker.

Another method for the continuous monitoring of the rate of change in volume of gastric contents was described by Griffith et al[2] in 1966 and involves the addition of non-absorbable radiochromium to ordinary food. This is a very useful method since it is a non-invasive technique and provides quantitative information in a single experiment without resort to potentially misleading mechanical factors like the introduction of a tube. This technique has the advantage of continuous monitoring so that information about the pattern of gastric emptying is also provided. As such, one single study provides both qualitative and quantitative data. The dose of radiation to the patient is unlikely to exceed that given by a single radiograph of the abdomen[2] especially if the patient receives a laxative after the study is completed.

This report describes our experiences with a modification of Griffith's technique.

Material and Method

Twenty-three patients were studied: 4 females ages 45-56 and 19 males ages 27-59. From those, 8 patients had a radiographic diagnosis of peptic ulcer (duodenal), 11 had no demonstrable gastrointestinal pathology, 2 had reactive hypoglycemia and 2 had chronic gastritis (endoscopic diagnosis).

The subjects did not eat or drink anything after 10:00 p. m. the night before the test. The tests were begun between 8:30 and 9:00 a. m. The isotope employed was labeled sodium chromate (Cr^{51} - Sodium Chromate 200 uci) and inert soluble, nonabsorbable isotope that mixes well in a glucose solution or with ordinary food.

In this study the isotope was incorporated into a glucose solution (40 gm per square meter of body surface). The final volume used was 300 ml (adjusted with water). The subjects drank their solution in approximately 15 to 20 seconds. Glucose was used at this concentration with the purpose of using this method in future studies in which both glucose tolerance and gastric emptying rate will be studied. Immediately after the glucose radiochromium solution was swallowed, the colimator of a gammacamera (pho-gamma 111 Packard) was placed over the left upper quadrant of the abdomen with the patient in the supine position. A piece of lead one centimeter in diameter was taped to the abdomen in the spot corresponding to the center of the area of isotope localization. In order to record these relationships, scintiphotographs were then obtained with a Polaroid photographic device adapted to the gammacamera. Once the center of isotope localization was marked and the lead removed, this area was made to coincide with the central axis of the detector of an external counter system (Picker Spectroscaler III Packard). The counts per minute obtained from this area were charted against time on semilogarithmic paper. The time that elapsed between the initial recording (100 per cent) and the time when the counts decreased by 50 per cent was considered to represent the gastric emptying half time (GET 1/2). Fig. 1

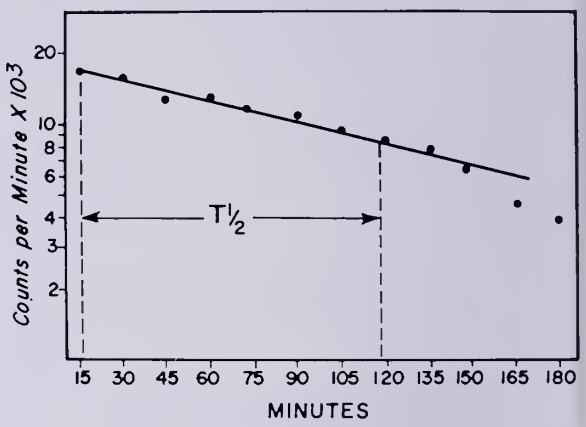

Fig. 1—This figure shows a typical curve obtained by plotting radio-activity counts in function of time in semilogarithmic paper and the way we obtained the GET 1/2 value.

Results

The GET 1/2 values are illustrated in Fig. 2. The duodenal ulcer patients in general showed a GET 1/2 (mean 60.3 min.) shorter than those observed in the control group (mean 97.8 min.). The difference was statistically significant ($p < 0.01$). The only two patients with gastritis included in the study had prolonged gastric emptying times. Both patients with reactive hypoglycemia showed fast gastric emptying rates.

Discussion

Although the basic pattern of gastric emptying has been classically described as an exponential process[3], Hung and Macdonald[4] have described this function as exponential only over a small part of the emptying process. Using meals of 1250 ml these investigators described gastric emptying as being faster at the beginning and at the end of the digestive period.

Hopkins in 1966[5], reviewing results previously published by Hunt and Spurrell[3], suggested that the square root of the volume remaining in the stomach fits better in a straight line than the direct values and explained this with a physical principle: the

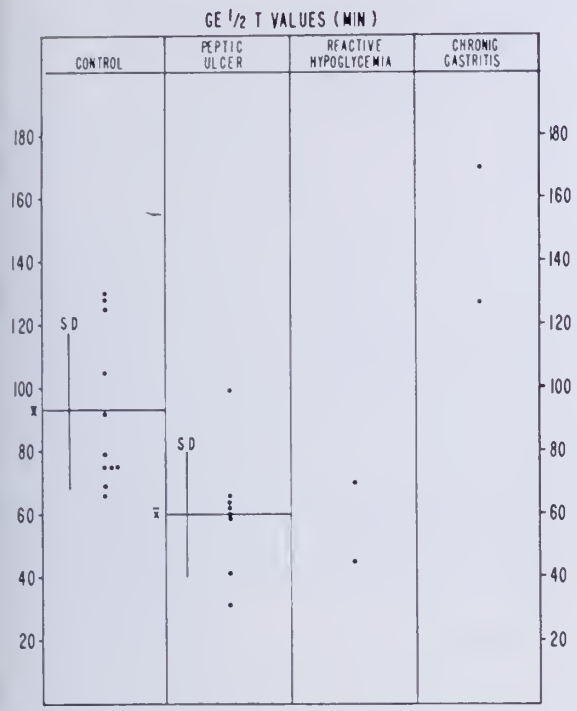

Fig. 2—Gastric emptying half time values obtained in the patients studied. The difference between means of the controls and duodenal ulcer patients was statistically significant ($p < 0.01$) (Two-sided analysis).

radius of a cylinder varies with the square root of the volume, and by the law of Lapace—the circumferential tension is proportional to the radius.

However, we also used the square root procedure and found that although this method gives values that fit better in a straight line, it also gives more artificial values and the curve obtained suggests a much longer GET 1/2 than actually exists.

Our results are in the same range as those previously published by Griffith et al[2]. We have found that with this method we obtained the ability to reproduce results in the same subject with variations in the range of 3 to 8 per cent. The patterns observed were variable in a basic exponential fashion although in some cases biphasic or even triphasic changes occurred. Except for differences in the rate of emptying no special pattern was characteristic of the pathologic states studied.

In evaluating gastric emptying rate, special attention should be given to the factors that might influence any study of gastric motility. The subjects should be kept supine throughout the period of evaluation to avoid any gravity-induced changes[6], as well as modifications in the topography of the monitoring system. The meals given should be of a constant type for any particular study to avoid any gross changes in p^H or osmolality in the gastric content; factors that could influence the rate of gastric emptying 7, 8, 9.

In addition to the study of pathophysiologic disturbances affecting the stomach this method also would be useful in evaluating the effects of pharmacologic agents on the stomach, e.g., anticholinergics or drugs that reportedly alter the rate of absorption of foodstuffs[10].

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1. Hunt, J. N., and Knox, M.: Regulation of Gastric Emptying. Chapter 94, Handbook of Physiology—Editor Werner Heidel. American Physiological Society. Washington, D. C. 1968.

2. Griffith, G. H., Owen, G. M., Kirkman, S. and Shields, R.: Measurement of Rate of Gastric Emptying Using Chromium-51, Lancet 1: 1244, 1966.

3. Hunt, J. N. and Spurrell, W.: The Pattern of Emptying of the Human Stomach. J. Physiol. 113:157, 1951.

4. Hunt, J. N., and Macdonald, I.: The Influence of Volume on Gastric Emptying. J. Physiol. 126:459, 1954.

5. Hopkins, A.: The Pattern of Gastric Emptying: A New View of Old Results. J. Physiol. 182:114, 1966.

6. Hunt, J. N., Know, M. T., and Oglinsky, A.: The Effect of Gravity on Gastric Emptying with Various Test Meals. J. Physiol. 178:92, 1965.

7. Hunt, J. N., Macdonald I., and Spurrell, W.: The Gastric Response to Pectin Meals of High Osmotic Pressure. U. Physiol. 115:185, 1951.

8. Hunt, J. N.: Influence of Hydrochloric Acid on Gastric Secretion and Emptying in Patients with Duodenal Ulcer. Brit. Med. J. 1:681, 1957.

9. Hung, J. N., and Knox, M. T.: The Effects of Acids on Gastric Emptying. J. Physiol. 181:63, 1965

10. Gomez-Perez, F. J., Ryan, J., and Staub, R.: Influence of Phenformin on Gastric Emptying Rate by Cr-51 Technique. Presented at the 73rd Annual Meeting of the American Society of Clinical Pharmacology and Therapeutics, March 9-10, 1972, Houston, Texas. U. S. A.

Middle Ear Measurements

Gay T. Wolcott, M. S., Birmingham, Alabama
Dennis G. Pappas, M. D., Birmingham, Alabama

Can you imagine a simple diagnostic procedure which will allow one to confirm the presence of fluid in the middle ears of a 10 month old baby and follow the course of the infection to its resolution, assess the level of lesion of the VIIth nerve in Bell's Palsy, and objectively distinguish a cochlear pathology from an VIIIth nerve problem all without cooperation from the patient?

Such a procedure is now available to medical practitioners involved with the treatment of ears. It is referred to variously as "impedance audiometry," "otoadmittance audiometry," and more broadly as "middle ear measurements."

Current instrumentation has developed along two parallel lines, the electro-mechanical and the electro-acoustic. Clinically, the electro-acoustic approach is finding the most widespread application to the clinical situation. This test is quick and easy to give. It can be administered by audiometrically unsophisticated personnel who have been properly trained, and valid and meaningful results can be obtained on virtually every patient.

Method

Apparatus

The instruments which are in current use are designed to assess middle ear function by measuring the admittance (or impedance) of the eardrum and middle ear system as the pressure in the ear canal is varied.

Two instruments are receiving the greatest attention currently. One is called the Otoadmittance Meter and is manufactured by the Grason-Stadler Company. A similar instrument is manufactured by the Madsen Company and is called an Impedance Bridge. Admittance is the direct reciprocal of impedance so the test results obtained with the different machines can be compared by simple mathematical procedures.

With either instrument it is necessary to make an air tight seal with a probe tip in the external auditory canal. The probe contains a "speaker" which presents the "probe tone", a pump which varies the air pressure in the canal to $\pm$ 400 mmH_2O re: ambient air pressure, and a microphone which detects changes in the sound pressure level of the tone as the pressure is changed or as the middle ear condition changes.

Tympanometry

Tympanometry describes how eardrum compliance changes as the pressure is changed in the instrument. As reported elsewhere (Jerger 1970) there are three basic types of curves obtained.

The first type is seen in normal or otosclerotic ears. Maximum values occur within $\pm$ 50mm H_2O of ambient pressure. The second type is seen in ears with otitis media. The curve is flat with no maximum value. The third type occurs in ears with blocked Eustachian tubes. The maximum value of the curve is obtained below -50mmH_2O of ambient pressure. Two additional types have been reported when a higher frequency probe tone is used. The first is seen with scarred or flaccid tympanic membranes. It has a double maximum with sharp peaks close together. The other is seen related to ossicular discontinuity. Again, there is a double maximum, but the peaks are broader and further apart. See the Illustrative Case Reports for examples of each of these types.

Acoustic Reflex

When the opposite ear is stimulated with pure tones at loud sensation levels, it is possible to observe the acoustic reflex in the ear which has the probe tip in it. Normally, this reflex is elicited at a sensation level

of 70-90 dB. If it occurs at a reduced sensation level, it indicates the presence or recruitment, a cochlear phenomenon, in the ear which is being stimulated by the pure tones.

A recent article by Anderson, Barr and Wedenburg suggests that the acoustic reflex will decay more rapidly in ears with VIIIth nerve tumors. This suggests that this test may be a vast improvement on the subjective tone decay test.

A chart follows which gives in a simplified summary form the different findings one would expect with several different ear pathologies.

Illustrative Case Reports

Case 1. Patient A. B. gave inconsistent responses on the bone conduction thresholds obtained on the right ear. It was the tester's impression that she probably did have a conductive hearing loss and that she merely over responded to the masking used in her opposite ear. Tympanometry yielded a normal curve in the left ear. The right ear showed the flat type of curve characteristic of otitis media.

Case 2. Patient H. K. Complained of a feeling of fullness in the right ear. Tympanometry was normal; however, when the instrument was set on its most sensitive reading it was possible to detect patency of

Otologic Finding	Tympanometry	Acoustic Reflex
Normal	Maximum values occur within ± 50mm H_2O ambient pressure	Normal levels bilaterally (70-90 dB sensation level)
Otosclerosis	Same as above, but peak may be reduced	Absent bilaterally even if loss is unilateral
Otitis Media	Flat curve; no maximum value	Absent bilaterally if loss is great enough; absent unilaterally on side with fluid with mild loss
Blocked Eustachian Tubes	Maximum value occurs below -50mmH_2O ambient pressure	Same as above
Patent Eustachian Tubes	Same as normal, but may show reduced or increased values	Can not read; meter moves with breathing when meter is in sensitive position
Bell's Palsy	May show same findings as blocked Eustachian Tube	Same as blocked Eustachian Tube
	Normal or reduced mobility	If reflex is absent on affected side, lesion is central to ennervation of the stapedius muscle.
		If reflex is present on affected side, lesion is peripheral to ennervation of the stapedius muscle.
Sensori-Neural Loss Cochlear	Usually normal findings	Reflex occurs at sensation levels below 70 dB suggesting recruitment
Sensori-Neural Loss-VIIIth Nerve	Usually normal findings	Reflex will decay within 10 seconds
Scarred or Flaccid Tympanic Membrane	Has a double maximum with Sharp peaks close together (660 Hz tone)	Normal
Ossicular Discontinuity	Double maximum with broad peaks (660 Hz tone)	Absent bilaterally
Perforation	Flat-will see loss of seal when Eustachian Tube opens	

the Eustachian Tube. On his return visit his discomfort was gone. Audiometrics confirmed improved hearing even though bone conduction results had suggested a sensorineural hearing loss (possibly related to the masking effect of his own breathing noises in that ear). There was no sign of Eustachian Tube patency when the instrument was in its sensitive setting. The first tympanogram was done using the 220 Hz probe tone. The second was done using the 660 Hz probe tone and it showed a slightly scarred tympanic membrane. Comparison of the two graphs shows that the 660 Hz tone shows more movement than the 220 Hz tone.

Case 3. Patient J. B. was a suspected otosclerotic. Surgery confirmed this diagnostic suspicion. Post-operative audiometrics showed considerable improvement. Tympanometry gives a flatter peak than is usually found with normals.

Case 4. L. G. was a patient with right sided Bell's palsy. Audiometrics were within normal limits and were bilaterally symmetrical. Tympanometry showed negative pressure in the right middle ear cavity suggesting a blocked Eustachian Tube. The paralysis cleared spontaneously within three weeks.

Case 5. Patient J. B. complained that she never felt that her middle ear pressure was equilibrated with atmospheric pressure. Audiometrics confirmed entirely normal hearing. Tympanometry showed scarred or flaccid tympanic membranes bilaterally. We have found that many patients with this finding on tympanometry have similar complaints.

Case 6. Mrs. B. S. a patient with left sided Bell's palsy had diminished acoustic reflex in the left ear. This suggests that the lesion of the facial nerve is central to the ennervation of the stapedius muscle. Since her paralysis did not clear with vasodilators, a facial nerve decompression procedure was performed and confirmed that her lesion was central to the ennervation of the stapedius muscle.

Case 7. Mr. W. P. had a right-sided Bell's palsy. His acoustic reflex in the right ear was brisk, suggesting that the lesion of the facial nerve was peripheral to the ennervation of the stapedius muscle. Again, his paralysis did not clear with vasodilators so a facial nerve decompression procedure was performed. This confirmed that the lesion was peripheral to the ennervation of the stapedius muscle.

Case 8. S. F. came in with itchiness and pain in the left ear. Examination showed external otitis. Audiometrics showed a slight difference between ears with the right ear better than the left. Tympanometry showed a fairly flat configuration with intertwining of compliant and resistive curves. This suggests involvement of the epithelial cells of the tympanic membrane. This has been a consistent finding in our office.

In summary, this is a test which can quickly provide information not only about the middle ear, but also about the inner ear and VIIIth nerve. It is simple to give, and can be administered in a relatively short period of time.

Rule Changes For Blood Donors

Two rule changes on who can donate blood have opened up a new field of potential donors. The permissible age has been lowered to 17 by the American Red Cross and American Association of Blood Banks (it previously was 18) and persons with a history of malaria can donate blood for use as plasma, three years after recovery from the disease. Before, they were permanently barred from donating blood. This change is based on the fact that malaria is transmitted only by cellular components of blood, such as red cells, and not plasma. Any 17-year-old donor still will require consent of his parents or guardian, unless the donor is married, self-supporting or in the armed forces.

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Fast relief of upper respiratory congestion and hypersecretion with convenient b.i.d. dosage.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*

Indications: Upper respiratory congestion and hypersecretion associated with the common cold, acute and chronic sinusitis, vasomotor rhinitis, allergic rhinitis (hay fever, "rose fever," etc.)

Contraindications: Hypersensitivity to any component; concurrent MAO inhibitor therapy, severe hypertension; bronchial asthma, coronary artery disease, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. Children under 6.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery). Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy: In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

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Precautions: Use cautiously in persons with cardiovascular disease, glaucoma, prostatic hypertrophy, hyperthyroidism.

Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth, nervousness, or insomnia. Also, nausea, vomiting, epigastric distress, diarrhea, rash, dizziness, weakness, chest tightness, angina pain, abdominal pain, irritability, palpitation, headache, incoordination, tremor, dysuria, difficulty in urination, thrombocytopenia, leukopenia, convulsions, hypertension, hypotension, anorexia, constipation, visual disturbances, iodine toxicity (acne, parotitis).

Supplied: Bottles of 50 capsules.

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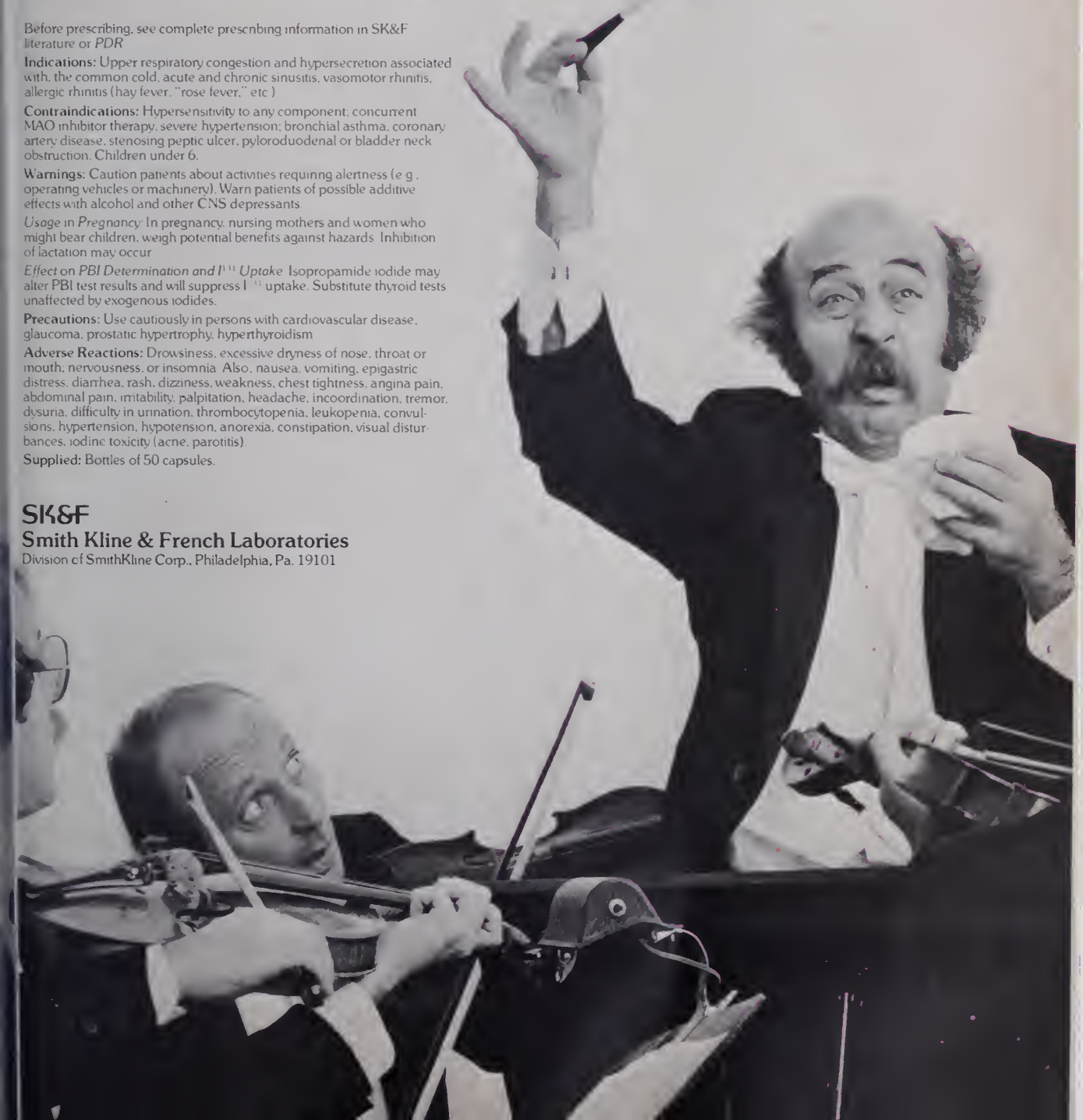

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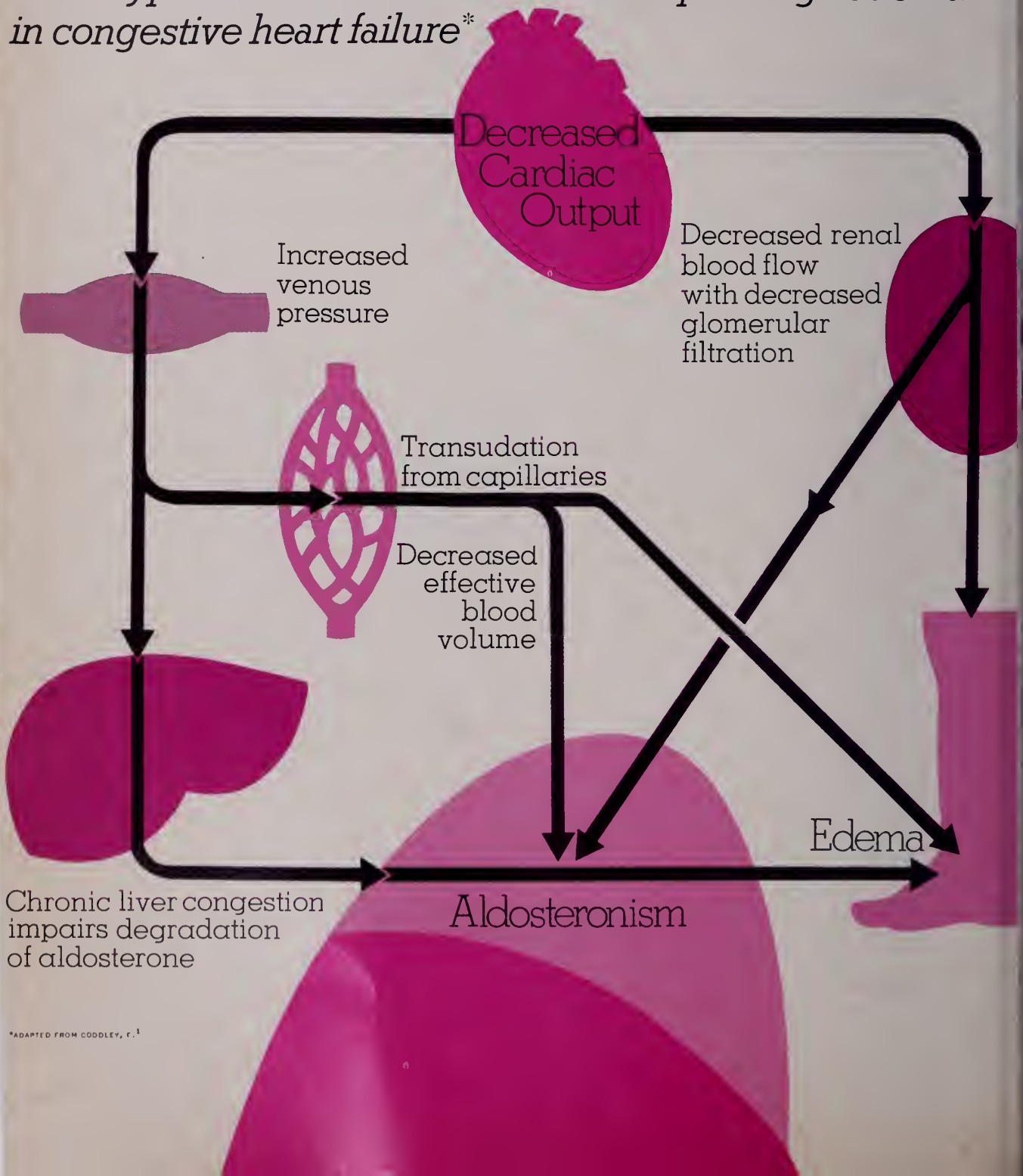
secondary aldosteronism

*How hyperaldosteronism leads to and prolongs edema in congestive heart failure**



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Aldactone plus "A.D.D." schedule inimizes potassium deficiency and tentiates effect of "add-on" diuretic.[2]
Avoids acute volume depletion and dosterone rebound.[2]

As a daily diuretic in combination with daily dose of a thiazide
Permits daily additive diuretic effect hile maintaining potassium balance.

Indications—Essential hypertension; edema or ascites of congestive heart failure, cirrhosis of the liver and the nephrotic syndrome; idiopathic edema. Some patients with malignant effusions may benefit from Aldactone (spironolactone), particularly when given with a thiazide diuretic.

Contraindications—Acute renal insufficiency, rapidly progressing impairment of renal function, anuria and hyperkalemia.

Warnings—Potassium supplementation may cause hyperkalemia and is not indicated unless a glucocorticoid is also given. Discontinue potassium supplementation if hyperkalemia develops. **Usage of any drug in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the mother and fetus.**

Precautions—Patients should be checked carefully since electrolyte imbalance may occur. Although usually insignificant, hyperkalemia may be serious when renal impairment exists; deaths have occurred. Hyponatremia, manifested by dryness of the mouth, thirst, lethargy and drowsiness, together with a low serum sodium may be caused or aggravated, especially when Aldactone is combined with other diuretics. Elevation of BUN may occur, especially when pretreatment hyperazotemia exists. Mild acidosis may occur. Reduce the dosage of other antihypertensive drugs, particularly the ganglionic blocking agents, by at least 50 percent when adding Aldactone since it may potentiate their action.

Adverse Reactions—Drowsiness, lethargy, headache, diarrhea and other gastrointestinal symptoms, maculopapular or erythematous cutaneous eruptions, urticaria, mental confusion, drug fever, ataxia, gynecomastia, inability to achieve or maintain erection, mild androgenic effects, including hirsutism, irregular menses and deepening voice. Adverse reactions are infrequent and usually reversible.

Dosage and Administration—For **essential hypertension** in **adults** the daily dosage is 50 to 100 mg. in divided doses. Aldactone may be combined with a thiazide diuretic if necessary. Continue treatment for two weeks or longer since an adequate response may not occur sooner. Adjust subsequent dosage according to response of patient.

For edema, ascites or **effusions** in **adults** initial daily dosage is 100 mg. in divided doses. Continue medication for at least five days to determine diuretic response; add a thiazide or organic mercurial if adequate diuretic response has not occurred. Aldactone dosage should not be changed when other therapy is added. A daily dosage of Aldactone considerably greater than 75 mg. may be given if necessary.

A glucocorticoid, such as 15 to 20 mg. of prednisone daily, may be desirable for patients with extremely resistant edema which does not respond adequately to Aldactone and a conventional diuretic. Observe the usual precautions applicable to glucocorticoid therapy; supplemental potassium will usually be necessary. Such patients frequently have an associated hyponatremia—restriction of fluid intake to 1 liter per day or administration of mannitol or urea may be necessary (these measures are contraindicated in patients with uremia or severely impaired renal function). Mannitol is contraindicated in patients with congestive heart failure, and urea is contraindicated with a history or signs of hepatic coma unless the patient is receiving antibiotics orally to "sterilize" the gastrointestinal tract.

Glucocorticoids should probably be given first to patients with nephrosis since Aldactone, although useful for diuresis, will not directly affect the basic pathologic process.

For **children** the daily dosage should provide 1.5 mg. of Aldactone per pound of body weight.

References: 1. Coodley, E.: Consultant 12:106-107, 109, 111, 113, 115 (July) 1972. **2.** Thorn, G. W., and Lauler, D. P.: Am. J. Med. 53:673-684 (Nov.) 1972.

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Placidyl®
(ETHCHLORVYNOL)

Brief Summary

Indications—Placidyl (ethchlorvynol) is indicated as short-term hypnotic therapy in the management of insomnia.

Contraindications—Drug hypersensitivity end porphyria.

Warnings—Not recommended during the first and second trimester of pregnancy. Caution patients of possible combined exaggerated effects with alcohol, barbiturates, tranquilizers or other CNS depressants. Exaggerated effects might result in blurring of vision, paralysis of accommodation and profound hypnosis. Caution patients concerning driving a motor vehicle, operating machinery, or other hazardous operations requiring alertness after taking the drug. ADMINISTER WITH CAUTION TO PATIENTS WITH SUICIDAL TENDENCIES AND DO NOT PRESCRIBE LARGE QUANTITIES OF THE DRUG. Adjustment of the dosage of oral anticoagulants might be necessary when beginning ethchlorvynol therapy, during therapy, or after stopping therapy. This drug is not recommended for use in children. PLACIDYL HAS THE POTENTIAL FOR THE DEVELOPMENT OF PSYCHOLOGICAL AND PHYSICAL DEPENDENCE. INSTANCES OF SEVERE WITHDRAWAL SYMPTOMS, INCLUDING CONVULSIONS AND DELIRIUM CLINICALLY SIMILAR TO THOSE SEEN WITH BARBITURATES, HAVE BEEN REPORTED IN PATIENTS TAKING REGULAR DOSES AS LOW AS 1000 MG. PER DAY OVER A PERIOD OF TIME WHEN THE DRUG WAS SUDDENLY DISCONTINUED. PROLONGED ADMINISTRATION OF THE DRUG IS NOT RECOMMENDED. Addiction-prone patients or those who are likely to increase dosages of the drug on their own initiative should be observed for evidence of signs or symptoms which may indicate possible early withdrawal or abstinence symptoms. Signs and symptoms associated with withdrawal and abstinence include unusual anxiety, tremor, ataxia, slurring of speech, memory loss, perceptual distortions, irritability, agitation and delirium. Other less well defined signs and symptoms, not necessarily due to withdrawal and abstinence, may include anorexia, nausea or vomiting, weakness, dizziness, sweating, muscle twitching and weight loss. Abrupt discontinuance of Placidyl following prolonged overdosage may result in convulsions and delirium.

Precautions—Toxic amblyopia has been reported with long-term continuous use of ethchlorvynol. Permanent visual defects have been observed, although amblyopia has improved after discontinuation of the drug. Drug dosage should be limited for elderly and debilitated patients to the smallest effective amount. If pain is present, this drug should only be given if insomnia persists after pain is controlled with analgesics. Caution is advised in prescribing the drug for patients who are being treated with either MAO inhibitors or antidepressants. Transient delirium has been reported with the combination of Placidyl and amitryptyline. Drug dosage should be reduced if prescribed for patients receiving MAO inhibitors or antidepressants. Caution should be exercised in patients with impaired hepatic or renal function. Patients who respond unpredictably to barbiturates or alcohol, or who exhibit excitement end release of inhibition in association with such agents, may also react in this way to Placidyl. Rarely, patients may exhibit symptoms suggestive of an unusual susceptibility to the drug; such as prolonged hypnosis, profound muscular weakness, excitement, hysteria, or syncope without marked hypotension. Transient giddiness or ataxia may occur.

Adverse Reactions—Hypotension, nausea or vomiting, gastric upset, aftertaste, blurring of vision, dizziness, facial numbness, and allergic reaction typified by urticaria have been reported following placidyl administration. Mild "hangover" and symptoms of mild excitation have occurred in some patients. There have been rare reports of cholestatic jaundice occurring in patients taking ethchlorvynol. A few cases of thrombocytopenia have been reported in patients receiving ethchlorvynol. 305432

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Guest Editorial—

The Joint Commission—A Refreshing Second Look

William J. Perry, M. D.
Hartselle, Alabama

It is possible that I had the only misconception of the aims of the Joint Commission on Accreditation of Hospitals.

In a refreshing review at a recent TAP Institute the importance of their effort to promulgate guidelines for improved hospital and medical practices is due more consideration than I for one had recognized or appreciated. After some twenty years of defending or criticizing good and bad medical practice while serving on Medical Utilization Review Committees—mostly without guidelines and with only nebulous references for critical analysis, a workable program appears promising without infringing on our rights for freedom of practice and without compromising medical care to the consumer.

As early as 1912, medical practitioners attending the annual meeting of the College of Surgeons were concerned about "establishing standards of hospital construction, administration, equipment, and all else that pertains to them." Thirty-nine years later an independent commission was set up . . . . . the Joint Commission on Accreditation of Hospitals. With its inherent interest to stimulate improved hospital practice it has developed into an unbiased protector of the consuming medical public. It has also become a catalyzer for physicians and educators. The Commission's urge is to have those who are truly responsible for the initiation of professional service, the physician, promulgate standards that will ensure him latitude in practicing a level of medicine that need be judged today, not only by his peers but also by a critical consumer.

The credibility that we as physicians establish for the economic delivery of medical care begins here. The success of the Joint Commission in "retooling" old habits and practice attitudes will depend upon the acceptance of their guidelines and their aims as the "quasi-public-licensing body."

If the concept of self policing and regulation by standards that presently can be set by dedicated physicians seems untenable to some of us, then the very concept of self-government is at stake. There is much inherent value in the voluntary approach and it is my feeling that for the government to replace this voluntary effort, the stabilizing reins on cost and delivery of consumable medical care will be unaccountable, . . . financially and physically.

I looked upon the Joint Commission as some "solid" bureaucratic group that arrived in advance of its hospital survey so that these "social visits" could be well planned - not so; I even felt that there might be some intrigue in order to pass inspection to obtain Federal funds - not so; I felt that the consuming public might not benefit from professional recommendations made by the Joint Commission - not so; I believed that efforts expended by the Joint Commission to develop and adapt methods of judging the "substance and finality of medical care and its efforts to adapt and apply standards for the determination of clinical privileges would result in textbook medicine - not so; my fear of liability in performing duties of professional audit through hospital committees was proven a myth.

(Continued on Page 506)

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

'he lesions on his face re solar/actinic– o-called "senile" keratoses... nd they may be premalignant.

lar, actinic or senile keratoses

se lesions may be called by several names, but they ally can be identified by the following characteris- . The typical lesion is flat or slightly elevated, of a vnish or reddish color, papular, dry, rough, adherent sharply defined. They commonly occur as multiple ns, chiefly on the exposed portions of the skin.

quence of therapy– ectivity of response

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Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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his patient's lesions were resolved with

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5% cream/solution...a Roche exclusive

(Continued from Page 503)

My respect for a change in the philosophies of the delivery of health care has been heightened as I feel that we as physicians can avoid the ineffectual hand of government with its weighted bureaucracy, statues and regulations for inspection and control of the practice of medicine *on their terms.*

This "freedom" can only be attained by the establishment of standards of prevailing medical care based on the training and philosophies of physicians initiating this medical care process.

Every physician need be aware of the changing scene of the consumer's demand and the insidious effect of third party influence. Our democratic institutions of medical delivery as we know them might well be lost to an autocratic government. The TAP sessions and the Joint Commission are our tools for meeting the demands of society on our grounds, providing acceptable criteria for judgment by third party entrepreneurs yet permitting us the privilege of practicing medicine at a measurable level.

More physicians should avail themselves of the informative review given by the Joint Commission through its TAP program.

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CONTINUING MEDICAL EDUCATION

Required CME?

Larry Dixon

"Should Associations Make CME Mandatory?" is the thought provoking title of an article by Edward P. Crowell, D. O., Executive Director, American Osteopathic Association, in the December, 1973, issue of *Medical Meetings.*

Dr. Crowell, concisely explains that the AOA has joined the AAFP in requiring CME credit hours for membership. Their requirement is based on the AMA's Physician's Recognition Award requirement of 150 hours per three year cycle. Dr. Crowell states that AOA members responded in an overwhelmingly positive and cooperative manner, and that, "Attendance at osteopathic conventions has increased 50-100 per cent over previous years, . . ."

MASA members are presently faced with the same decisions the AOA faced. There is a very strong effort being made to require a specified number of CME credit hours for membership in this state medical association. Such a move is by no means original. Currently there are approximately six state associations that require a specified number of CME credit hours for membership. These state associations are Oregon, Arizona, Pennsylvania, New Jersey, Massachusetts and Florida. The programs of these states, as well as the number of credit hours they require, are varied. Along the same vein, the State Board of Medical Examiners in three states, New Mexico, Kansas and Maryland, have a legal right to require CME credit hours for re-registration of the license to practice medicine. However, New Mexico is the only state currently en-

(Continued on Page 510)

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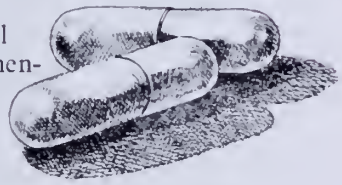

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ntraindications: Patients with glaucoma; prostatic hyperphy and benign bladder neck obstruction; known hypersenvity to chlordiazepoxide hydrochloride and/or clidinium mide.

rnings: Caution patients about possible combined effects h alcohol and other CNS depressants. As with all CNSing drugs, caution patients against hazardous occupations uiring complete mental alertness (*e.g.*, operating machinery, ving). Though physical and psychological dependence have ely been reported on recommended doses, use caution in ninistering Librium (chlordiazepoxide hydrochloride) to own addiction-prone individuals or those who might increase sage; withdrawal symptoms (including convulsions), following continuation of the drug and similar to those seen with barurates, have been reported. Use of any drug in pregnancy, tation, or in women of childbearing age requires that its ential benefits be weighed against its possible hazards. As h all anticholinergic drugs, an inhibiting effect on lactation y occur.

cautions: In elderly and debilitated, limit dosage to smallest ective amount to preclude development of ataxia, oversedan or confusion (not more than two capsules per day initially; rease gradually as needed and tolerated). Though generally recommended, if combination therapy with other psychopics seems indicated, carefully consider individual pharmaogic effects, particularly in use of potentiating drugs such as AO inhibitors and phenothiazines. Observe usual precautions presence of impaired renal or hepatic function. Paradoxical ctions (*e.g.*, excitement, stimulation and acute rage) have n reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

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(Continued from Page 507)

forcing this legislated authority.

Obviously, other state associations have voluntarily faced, or have been forced to face, this issue and have responded in a variety of ways. Now the question is which avenue will MASA travel in resolving Resolution 13 of the 1973 Annual Session? The Resolution would require 150 hours of continuing medical education for continued membership in MASA. The particulars of the requirement, i.e., length of time in which to get the hours, how hours are classified, disposition of retired members, etc. are contained in the bylaws. The Association's present constitution requires an amendment "to rest on the table" for one year to allow time for the membership to thoroughly study the issue. In Huntsville at the 1974 Annual Session, the Association must decide.

The promoters of this amendment have tried to be fair. They recognize that nothing is absolute when you are dealing with people. Therefore, the amendment contains provisions allowing for, among others, illness, formal education, a grace period, and an appeal mechanism. These same physicians also recognize that members of the medical profession are being viewed with a scrutiny never before witnessed in modern medicine. Politicians, consumer advocates, and members of the public daily examine this country's physicians. When an apparent weakness appears, it is quickly assigned a program designed to "cure" the situation.

Many physicians firmly believe that medicine must do its utmost to prevent accusations of incompetency by virtue of "getting behind". To them, mandatory CME requirements would serve notice to the citizens of Alabama that MASA recognizes its responsibilities to maintain a professional competence that can be boasted by no other group of professionals. Physicians of this state are the ones responsible for the health care of the people and, as a group, do not need legislated controls. These beliefs, coupled with a firm conviction that a physician must attain CME in order to stay

(Continued on Page 518)

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea. In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule. 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.
Rev. 6/73

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The Board of Directors of the American Academy of Family Physicians

The Executive Board of the American Academy of Neurology

The Committee on Drugs of the American Academy of Pediatrics

The American College of Allergists

The Executive Committee of the American College of Obstetricians and Gynecologists

The Board of Regents of the American College of Physicians

The Board of Trustees of the American Dental Association

The Board of Trustees of the American Medical Association

The American Psychiatric Associati

The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

'oint Statement on Antisubstitution Laws and Regulations

The purpose of this statement is o affirm the support of the participat- ng organizations for the laws, regula- ions and professional traditions which rohibit the unauthorized substitution f drug products.

Traditionally, physicians, den- ists and pharmacists have worked ooperatively to serve the best inter- sts of patients. Productive coopera- ion has been achieved through nutual respect as well as a common oncern for the ideals of public ervice. This mutual respect has been eflected, in part, by joint support ver the years for the adoption and nforcement of laws and regulations pecifically prohibiting unauthorized ubstitution and encouraging joint liscussion and selection of the ource of supply of drug products. he basic principles of medical, den- al and pharmacy practice are thus tilized and preserved in the interest f patient welfare.

The antisubstitution laws have ot obstructed enhancement of the rofessional status of pharmacy any nore than they have in and of them- elves guaranteed absolute protec- ion from unsafe drugs, or freed hysicians, dentists and pharmacists rom their responsibilities to patients. s a practical matter, however, such aws and regulations encourage inter- rofessional communications regard- ng drug product selection and assure ach profession the opportunity to xercise fully its expertise in drug sage, to the advantage of patients.

Physicians and dentists should e urged to increase the frequency nd regularity of their contacts with harmacists in selection of quality rug products, recognizing that economies to patients can be im- proved through such communica- tion, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physi- cians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selec- tion remain primary and do not per- mit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved under- standing and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthor- ized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

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MEDICO - LEGAL DIALOG

Liability Of Doctors From The Administration Of Medication

Paul W. Brock
Mobile, Alabama

In a general sense, the duty of a doctor in administering medicines to a patient, either by injection or otherwise, is the same as is his duty in performing any other professional act. In *Torrance v. Wells,* 219 Ala. 384, 122 So. 322 (1929), is found this definition of the legal duty of doctors:

> "A physician or surgeon undertakes to exercise at least ordinary diligence and skill in the treatment of his patient—such care and skill as physicians and surgeons in the same general neighborhood, pursuing the same general line of practice, ordinarily exercise in like cases."

While this so called "local rule" is under attack by many plaintiffs' lawyers who urge a national standard, this local or community rule is still applied in the trial courts of Alabama.

Shelton v. Hacelip, 167 Ala. 217, 51 So. 937 (1910), is the earliest reported medical malpractice case.[1] The minor plaintiff had sued for loss of sight of her right eye, alleging that it resulted from application of medicine prescribed by the defendant doctor. Despite expert testimony to the effect that there was no harmful ingredient in the medicine and, further, that the medicine could not have caused the injury complained of, the jury returned a verdict in favor of the plaintiff. The Supreme Court enunciated the general standard of care required by doctors (as first stated herein) and reversed and remanded, holding that the defendant's motion for a new trial should have been granted inasmuch as the verdict was against the preponderance of the evidence.

The court followed, although it did not state it was doing so, the rule set forth in later Alabama malpractice cases, to the effect that, in certain instances, even though there was a conflict in the evidence as a whole, if there was no conflict in the *expert* testimony, it would control.[2] The Alabama law is also clear that there must be affirmative evidence of negligence and that the mere fact that an injury follows an injection by the doctor is not sufficient to take the case to the jury. In other words, the legal doctrine of res ipsa loquitur does not apply. In *Moore v. Smith,* 215 Ala. 592, 111 So. 918 (1927), the court reversed a verdict for the plaintiff, stating that the mere fact that the intestate's infection had followed an injection by the defendant doctor by twenty-four hours and that there was a possibility that the infection had entered the body at the site of this injection was insufficient to take the case to the jury. The report shows this:

> "Obvious corollaries to the rule of liability are that a physician or surgeon, unless by express undertaking, does not warrant a cure or a successful result, and is not liable for an honest mistake or error of judgment in making a diagnosis, or prescribing a mode of treatment, where the proper course is subject to reasonable doubt. *Barfield v. S. H. Infirmary,* 191 Ala. 553, 68 So. 30 . . . .
>
> And the mere possibility of such a result is not sufficient.
>
> The doctrine of res ipsa loquitur does not apply to the mere fact of a blood in-

(Continued on Page 517)

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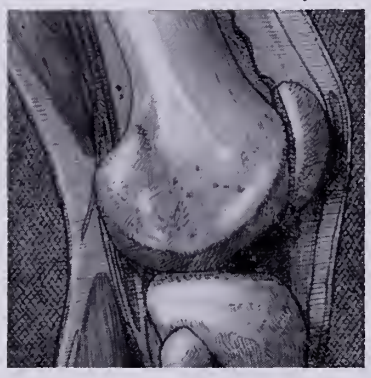

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(Continued from Page 515)

fection, however closely, in a temporal sequence, it may follow a medical treatment. 'The burden of proof is not shifted by showing that an unsuccessful result was attended the treatment of the patient by the physician. Nor does the unsuccessful result of the case shift from the plaintiff to the defendant the burden of going forward.' "

Space does not permit a fuller discussion of other legal principles affecting the liability of doctors. However, in brief, it is a general rule of law that a doctor should advise his patient of any inherent risks which might arise not only from the administration of a medication, but from any medical or surgical procedure which is undertaken.

It is also generally true that an action against a doctor will charge him with either negligence or wantonness (which is equivalent to very gross negligence) in his treatment and not with breach of contract, since Alabama law *probably* does not imply a contract to render skillful treatment, but only implies a duty, the breach of which is actionable in tort.

Finally, regardless of the type of action brought, under Title 7, Section 25(1) of the *1940 Code of Alabama,* as last amended and recompiled, all actions against doctors and dentists, whether based on contract or tort, must be commenced within two years, the exception being that if the cause of action is not discovered and could have reasonably been discovered within the two years, then it may be commenced within six months from the date when the cause was actually discovered or reasonably should have been discovered, subject to an outside limitation of six years after the act forming the basis of the suit. The section reads, in pertinent part, as follows:

"Section 25(1). Same; actions against physicians and surgeons and dentists for malpractice.—(1) All actions against physicians and surgeons, and dentists for malpractice, error, mistake, or failure to cure, whether based on contract or tort, must be commenced within two years next after the act or omission or failure giving rise to the cause of action, and not afterwards. Provided that if the cause of action is not discovered and could not reasonably have been discovered within such period, then the action may be commenced within six months from the date of such discovery or the date of discovery of facts which would reasonably lead to such discovery, whichever is earlier, provided further that in no event may the action be commenced more than six years after such act."

1. While the earlier case of McDonald v. Harris, 131 Ala. 359, 31 So. 548, is cited in *Shelton* as authority for the general rule of the standard of care of a physician, *McDonald* is not a malpractice case, but is one in which the doctor sued for the value of his medical services.

2. *Carraway v. Graham*, 218 Ala. 453, 118 So. 807; *New York Life Insurance Co. v. Horton*, 235 Ala. 626, 180 So. 277; *Provident Life and Accident Insurance Co. v. Nelson*, 263 Ala. 700, 34 So. 2d. 130.

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(Continued from Page 510)

abreast of the new developments in medicine, are the reasons CME requirements for membership have been proposed by your colleagues.

The House of Delegates and College of Counsellors will decide this issue in April. Regardless of the outcome, a question needing an answer will be squarely faced.

(Continued from Page 486)

Lawrence County

McCorkle, Raymond Edward, b 21, mc Loma Linda 56, recip. California 73, Courtland Clinic, P. O. Box 400, Courtland, Alabama 35618. GP.

Madison County

Yu, Peter Shu-Kuen, b 34, mc St. Louis 63, recip. Louisiana 73, Bank of Huntsville Building, Suite 404, Huntsville, Alabama 35801. ThS-C.

Mobile County

Donovan, Arthur Joseph, b 25, mc Tufts Univ. 48, recip. NBME 73, 2451 Fillingim Street, Mobile, Alabama 36617. S.

Harris, John Aldridge, b 40, mc Alabama 66, recip. NBME 68, 1555 Springhill Avenue, Mobile, Alabama 36604. I.

Roberts, Gayle Arlen, b 38, mc Kentucky 66, recip. Kentucky 70, 1720 Springhill Avenue, Mobile, Alabama 36604. I.

Montgomery County

Mazyck, Arthur, b 37, mc Cornell Univ. 63, recip. Georgia 73, 1722 Pine Street, Montgomery, Alabama 36106. R.

Mazyck, Elizabeth Maxwell, b 41, mc Johns Hopkins 66, recip. Maryland 73, 1722 Pine Street, Montgomery, Alabama 36106. Pd.

Randall, Frank Candler, Jr., b 40, mc Alabama 66, recip. NBME 67, 1722 Pine Street, Montgomery, Alabama 36106. U.

Sumners, John Herbert, b 43, mc Mississippi 68, recip. Mississippi 73, 2900 McGehee Road, Montgomery, Alabama 36111. Pd.

Tallapoosa County

Watwood, John Little, b 38, mc Alabama 64, recip. NBME 68, Medical Arts Building, Alexander City, Alabama 35010. S.

MEMBERS DECEASED

Cleburne County

Mercer, Franklin Eugene, Heflin, Alabama, Deceased 10/5/73

Dallas County

Kirkpatrick, Samuel McCurdy, Selma, Alabama, Deceased

Etowah County

Batson, Paul James, Jr., Gadsden, Alabama, Deceased 12/30/73

Mobile County

Hyde, Mattie Isbell, Mobile, Alabama, Deceased 10/27/73

Zieman, Stephen Aloysius, Mobile, Alabama, Deceased 11/26/73

Morgan County

Greer, Hugh Dixon, Decatur, Alabama, Deceased 12/7/73

CHANGES OF ADDRESS

Calhoun County

Branyon, Edgar Watterson, Jr., present Anniston to Medical Arts Building, Anniston, Alabama 36201.

Donald, Thomas Claude, Jr., present Anniston to 1010 Christine Avenue, Anniston, Alabama 36201.

Edwards, John Archibald, Jr., present Anniston to 1010 Christine Avenue, Anniston, Alabama 36201.

Gibbins, George Marshall, present Anniston to Box 970, Anniston, Alabama 36201.

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(Continued on Page 520)

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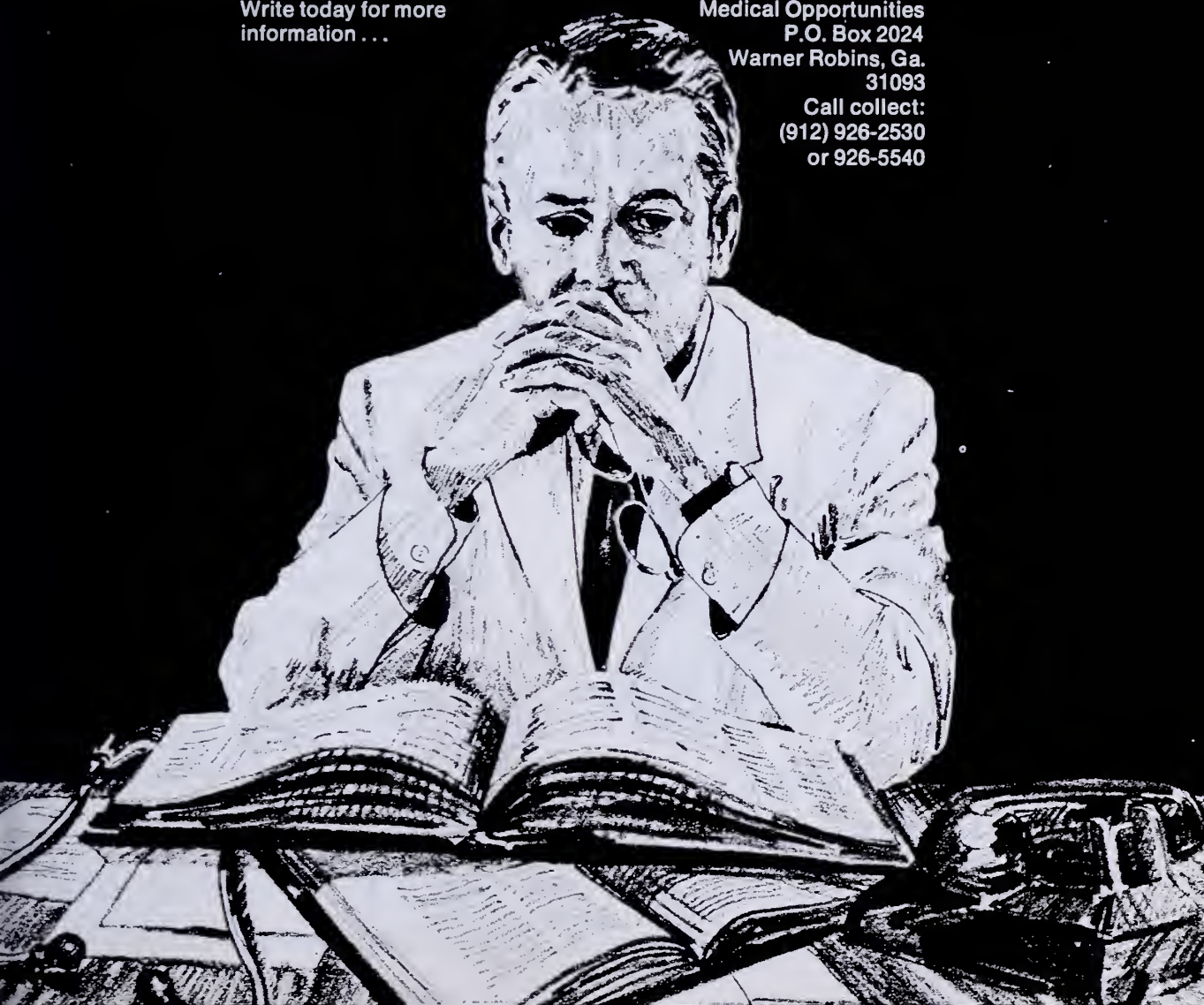

(Continued from Page 518)

Judge, Dom Joseph, present Anniston to 1001 Leighton Avenue, Anniston, Alabama 36201.

Lokey, Robert Henry, present Anniston to 1010 Christine Avenue, Anniston, Alabama 36201.

Luther, Gertrude Catherine, present Anniston to A-5 McMillan Terrace, Anniston, Alabama 36201.

McCrimmon, Cyrus Herbert, Jr., present Anniston to 825 Keith Avenue, Anniston, Alabama 36201.

McGinnis, Gaston Owen, present Anniston to 216 East 8th Street, Anniston, Alabama 36201.

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Jackson County

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Jefferson County

Dixon, Gloria Anne, present Birmingham to 4237-Harpers Ferry Road, Birmingham, Alabama 35213.

Hodo, John Baldwin, present Birmingham to 1500 6th Avenue South, Birmingham, Alabama 35233.

Hyman, Miles Donald, Torrance, California to Foxhills, California 90230.

Rountree, Walter Boyce, present Birmingham to 518 Villa Esta Lane, Birmingham, Alabama 35214.

Wiltsie, Robert Edward, present Birmingham to 7916 2nd Avenue, South, Birmingham, Alabama 35206.

Woodman, Thomas David, present Bessemer to P. O. Box 688, Bessemer, Alabama 35020.

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Hunter, James Webb, Jr., present Florence to 409 N. Cedar Street, Florence, Alabama 35630.

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Little, Joe Hollis, present Mobile to 18 South Catherine Street, Apt. 2, Mobile, Alabama 36604.

Montgomery County

Palmer, Glenn Fair, present Montgomery to 1759 Pine Street, Montgomery, Alabama 36106.

Shadburn, William Burton, Ft. Worth, Texas to Suite 207, 750 Washington Avenue Montgomery, Alabama 36104.

Williams, James Robert, Montgomery, Alabama to Knoxville, Tennessee 37901.

Morgan County

Hamilton, John Sewell, present Decatur to 2312 Greenbriar Lane, S. E., Decatur, Alabama 35601.

Levie, Benton Bains, present Decatur to 1201 Somerville Rd., S. E., Decatur, Alabama 35601.

Tallapoosa County

Burns, Frank Martin, Dothan to Medical Arts Building, Alexander City, Alabama 35010.

Tuscaloosa County

Davis, Jerry Arnold, present Tuscaloosa to 922 5th Avenue, East, Tuscaloosa, Alabama 35401.

Shamblin, James Roscoe, Jr., present Winfield to P. O. Box 710, Winfield, Alabama 35594.

Todd, John Norton, III, present Tuscaloosa to 203 E. Hargrove Road, Tuscaloosa, Alabama 35401.

(Continued on Page 522)

(Continued from Page 488)

With the needle procedure, if the lump is malignant, "the situation can be discussed with the patient's physician so she can be psychologically prepared for surgery," the doctors said.

The report said 281 patients, with a total of 324 lesions, were studied. In 273 cases, the diagnosis (confirmed by other means) was benign. In 15, an initial finding of abnormality was followed by a report of benign after a conventional biopsy. Thirty-six patients had breast cancer.

Needle aspiration also can catch those cancers missed by the x-ray procedure, mammography, which is widely used in breast screening, Dr. Kline said. "In our 36 cases of malignancy," she said, "mammography was done only in eight and in three the mammogram was considered benign."

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Hodnett, Cary G., Jefferson 591-4000

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Logue, Hary E., Jefferson 780-6686

Lytle, Richard A., Jefferson 934-3411

Mazyck, Arthur, Jr., Montgomery 262-3032

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Myers, George H., Jr., Jefferson 934-4932

Nolen, Jack R., Etowah 546-9245

Oliver, Robert I., Jefferson 933-8841

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Supreme Court Clarifies Alabama Doctor-Patient Privilege Statute

The State of Alabama has traditionally not given privileged status to communications between a physician and a patient. Alabama is a common law state and at common law neither the patient nor the physician was afforded the privilege of refusing to disclose a communication of one to the other in a court of law. Several states have enacted statutes which make communications between physicians and patients privileged from compulsory disclosure in courts of law. Where this has been done the traditional common law is superseded. The State of Alabama has enacted no such statute and thus the rule of the common law remains.

The Alabama Supreme Court has recently been presented with several questions concerning the status of the physician-patient privilege in Alabama or lack of the same. A recent case alleged that a doctor, the defendant, disclosed information concerning his patient, the plaintiff, to the patient's employer. The plaintiff alleged that he specifically instructed the doctor not to disclose any information the doctor obtained during the course of treatment. The patient alleged that the doctor had breached a fiduciary duty owed to him and also invaded his right of privacy by making the disclosure to his employer.

The Court made a distinction between physician-patient communications which are privileged in court and extra-judicial or out-of-court disclosures which might be made by a doctor. The decision did not recognize or establish a physician-patient privilege but instead addressed itself to the conduct expected of a physician outside of courts of law.

The Court was first presented with the question of whether there existed a confidential relationship between a doctor and patient which imposed a duty on the doctor to not disclose information obtained of his patient in the course of treatment?

The Court answered this question in the affirmative and stated ". . . it appears that the sounder legal position recognizes at least a qualified duty on the part of a doctor not to reveal confidences obtained through the doctor-patient relationship." The Court concluded ". . . that a medical doctor is under a general duty not to make extra-judicial disclosures of information acquired in the course of doctor-patient relationship and that a breach of that duty will give rise to a cause of action."

Secondly, the Court addressed itself to the question of whether the unauthorized disclosure of a patient's medical record constitutes an invasion of the patient's right of privacy?

The Court stated that it ". . . has recognized the right of a person to be free from unwarranted publicity or unwarranted appropriation or exploitation of one's personality . . . with which the public has no legitimate concern." In applying this right of privilege to the case presented the Court said:

> "Unauthorized disclosure of intimate details of a patient's health may amount to unwarranted publicization of one's private affairs with which the public has no legitimate concern such as to cause outrage, mental suffering, shame or humiliation to a person of ordinary sensibilities. Nor can it be said that an employer is necessarily a person who has a legitimate interest in knowing each and every detail of an employee's health."

The Court, therefore, did not fully answer this question but stated that it would depend upon the circumstances of the individual case, whether it was in the best interest of the public and society and the patient to disclose this personal information about the patient.

The final question to which the Court addressed itself was whether the alleged disclosure breached an implied contract be-

tween the physician and patient to keep confidential the information which the patient gave the doctor in the course of his treatment? The Court defined an implied contract as that which ". . . arises where there are circumstances which, according to the ordinary course of dealing and the common understanding of men, show a mutual intent to contract."

The Court answered this question in the affirmative stating that they had not been referred to any authority to discount the plaintiff's contention that there existed an implied contract of confidentiality. The court went on to say that ". . . public knowledge of the ethical standards of the medical profession or widespread acquaintance with the Hippocratic oath secrecy provision, or the AMA's principles of ethics, or Alabama's medical licensing requirements of secrecy (Title 46, sec. 257, 21 *Alabama Code*) singly or together may well be sufficient justification for reasonable expectation on the part of a patient that the physician has promised to keep confidential all information given by the patient."

The Court qualified their affirmative answer to the third question in the same manner in which they qualified the answer to the second question stating that ". . . any confidentiality between patient and physician is subject to exception where the supervening interest of society or the private interest of the patient intervene." In the case presented the Court found no interest of society which would supersede the right of the patient to have his condition kept confidential.

No Seasonal Pattern Found In Suicides

Suicides defy any fixed seasonal or climactic patterns, says a report in Archives of General Psychiatry.

Researchers at Duke University Medical Center and Durham Veterans Administration Hospital, Durham, N. C., analyzed reports of 3,672 deaths by suicide in North Carolina from 1965 to 1971.

They found no major upsurges for special holidays, weekdays versus weekends, months or seasons. Only in days of the week was a difference noted. The highest proportions of suicides during the week were on Mondays. Climate had no impact, when statistics on whether the suicide days were hot or cold, rainy or clear, humid or dry, short or long were compared.

Special holidays—New Year's Day, Easter, Memorial Day, July 4, Labor Day, Thanksgiving and Christmas—also showed no higher rates than other days.

"For the present it seems that early recognition of depression and its subsequent treatment may be the most effective measure we have today for suicide prevention," the report says.

Doctors Say Players' Football Helmets Injure Opponents

Football players' helmets and face masks cause broken noses, teeth, and jaws, three medical specialists warn.

The injuries are the result both of inadequate face mask protection and helmets which do not properly fit say Dr. Kent Wilson of the University of Minnesota Hospitals, Minneapolis, and Drs. Eugene and Michael Rontal of Detroit.

They claim that while facial injuries have become less frequent since face masks have become mandatory, "These injuries nevertheless occur too frequently and currently comprise 10 per cent of all football injuries. Because football is the most widely participated-in sport in the United States, the problem is significant and warrants attention."

Facial injuries occur in four ways say the doctors. These are:

(Continued on Page 526)

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1. Noses are bent or broken when a helmet which fits too loosely is lifted from behind. As the helmet rotates forward, the brow edge dents the nose. "This rotation usually results from traction illegally applied to the players' face mask. It also may result from blocking or tackling forces delivered to the occiput" [back of the skull].

2. Teeth and jaws are broken during high tackling and blocking when one player butts or spears another player from below.

3. Noses and cheekbones are broken when, in a pass rush situation, one player strikes with his forearm over an opponent's double bar face mask.

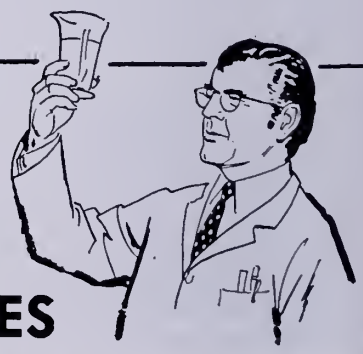
4. Teeth and jaws may be broken, as a forearm, used to block, or to ward off blockers at the line of scrimmage, comes up under the face mask.

Drs. Wilson and Rontal say their experience in examining and treating injured football players leads them to conclude that "The full-cage face mask provides the greatest amount of protection currently available. This mask is a combination of vertical and horizontal bars which completely cover the face and extend well below" the lower jaw.

They add that injuries to the face of football players could also be reduced if helmets were fitted properly—that is, snugly so they can't rotate. A new four-point chin strap can help. Also, "strict rule enforcement" regarding butting or spearing and face mask violations "is of utmost importance."

The doctors add that new developments in headgear design may make them fit better in the future, especially the development of a pneumatic helmet, and, better padding of the rim of helmets.

Thanks to new equipment, they say, "It is no longer true that facial injury is 'the price for playing the game.' "



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President's Page

Sports Injuries

J. Kendall Black, Jr., M. D.
Huntsville, Alabama

EDITOR NOTE: *Dr. Black is writing, at Dr. Camp's request, a guest column for the President's Page this month.*

The extension of organized athletics to involve a major segment of our youth, not only in high school, but junior high and elementary school must be accepted as a fait accompli which can not be ignored. In fact, the trend is toward an even more inclusive program. Our efforts, as physicians, must not be to decry athletics but to demand greater participation and to apply ourselves to the improvement of the whole background of organized athletics.

A major objection to competitive athletics is the spectre of physical injury. Certainly athletes do get physical injuries—occasionally even serious or fatal injuries. It is the challenge to physicians to do everything in our power to minimize these injury risks which interfere with the goals of athletic participation.

Not many years ago, we were the last resort. The player, coach, trainer and often the public felt that once a player reached the doctor, his days as an athlete were over. Fortunately, a more enlightened approach has demonstrated that everyone is better served by having the injured player properly and ably treated. In the well-run athletic program of today, the coach, trainer and physician all combine in one effective unit to keep the players well equipped and in ideal condition.

DR. BLACK

In treating the injured athlete, the following concepts of treatment are applicable:

1. Accept athletics. The physician and no one else must recognize the value of competitive athletics. The doctor must believe it is necessary for this patient to return to athletics and must not deprecate that ambition or rapport will be lost.

2. Avoid expediency. Many outside factors tend to influence our decision but this should not be permitted. The goal is to prevent permanent disability and expediency has no place in reaching this goal.

3. Adopt the best method of treatment. Your medical evaluation of the injury must be the controlling factor in treatment. The decisions must be objective and must recognize that temporizing will not achieve the best results.

4. Act promptly. A definitive decision as to the proper method of treatment must be made at the earliest possible moment and then that method must be carried out. Delay can spell the difference between success and failure.

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As doctors wives we must help our husbands take care of themselves. Men are high risks for heart attacks, high blood pressure and strokes.

If your husband is overweight, try to encourage better eating habits. Those extra pounds force his heart to pump that much more blood through his blood vessels. Reaching and maintaining the correct weight helps reduce blood pressure. Worry, nervous tension and emotional strain also help push blood pressure up. Recreation and exercise in moderation will help keep a healthy body. Exercising shouldn't be a grim task, it can be made a pleasure.

Work toward encouraging your husband to get plenty of rest, stop smoking and drink in moderation. This will make him feel much better and improve his future health.

Bronchitis, emphysema, cancer of the lung, kidney, pancreas and bladder, and heart disease also have been on the rise, thanks in part to tobacco smoking. Cigarette smokers were found to have 30 - 80 per cent greater over-all mortality rate than nonsmokers. Any one of the risk factors so far discussed adds significantly to the chances of getting a heart attack. When several are combined, the danger is greatly multiplied - up to seven times with high blood cholesteral, multiplied by up to seven times more for high blood pressure, multiplied by two for smoking a pack of cigarettes a day. When risks are multiplied this way one can see even more clearly the consequences of the high-calorie, high-fat, inactive style of life of affluent societies. Encourage your doctor-husband to have routine medical check-ups to prevent serious illness.

Auxiliary members should take an active part in helping to develop Emergency Medical Services in their communities. Emergency Medical Care systems include first aid and rescue, transportation, communications and emergency facilities which cover staffing and patient management. Emergency Medical Care systems function through the cooperation of physicians, paramedical personnel, hospitals, ambulance services, government, fire and police and other agencies in-

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5. Achieve perfection. This is an obvious goal—not always possible, but always desirable.

These concepts of treatment are goals which are attainable within the framework of athletics as they are presently organized. They represent a program which is better for the doctor, the team, the coaches and especially for the player.

In attempting to achieve these goals, we physicians who are called upon to treat these injuries must begin to develop more communication at the state level. This communication must not only include participation in continuing educational programs on sports medicine, but, in my judgement, should include the yearly exchange of statistical information regarding injuries. I would like to see us develop at the state or district levels a method of reporting sports injuries, both on the training fields and during actual game participation. A report could be initiated by the coach, manager, trainer or team doctor. It should include as much information as possible, not only regarding the injury, its treatment and outcome, but also the age, height, weight and playing experience of the player. In fact, it should include almost any necessary or desired information. The professional teams do this as well as many colleges;—surely we could utilize their forms and take advantage of this age of computors.

What do you think?

(Continued from Page 535)

volved in planning coordination, implementation and review of such care systems. Helping to develop Emergency Medical Care facilities in your community could help in saving many lives—perhaps even *your* husband's life.

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Hospital Categorization

C. Doyle Haynes, M. D., FACS

The basic purpose of categorization of hospitals is to identify the readiness and capabilities of the hospital and its entire staff to receive and treat emergency patients. Ambulance personnel, firemen, law enforcement officers, and other citizens of the area, with advance knowledge of the designated categories, may select the proper institution to which patients should be taken. As total categorization of hospitals evolves, some hospitals may be able to close emergency departments and thus conserve resources and money. Other hospitals should expand their capabilities thereby creating total improvement for the care of the acute and non-acute patient.

Categorization of emergency treatment should be planned and developed in regions throughout the state. Geographic limits within the states as well as interstate transport of patients must be taken into consideration.

Problems concerning local emergency services as well as transportation vary widely within the state and from state to state. Many border areas transport patients across state lines and these areas should be included. It appears that for these reasons categorization of emergency capabilities should be based initially on self-evaluation by hospitals and their medical staffs.

In 1971, guidelines for the categorization of hospital emergency capabilities were recommended by the AMA commission on emergency medical services. These were published in booklet form and have been used as a basic guideline for recommendation for the state of Alabama. The categories have remained the same but the criteria for each category have been altered slightly to better conform to the majority of hospitals in the state.

A brief chart has been drawn outlining the categories and the criteria for being in each category. The capability of a facility really depends on the availability of the emergency room physician with immediate back up of the specialities. In only a few hospitals in the state does the operating room remain ready and staffed 24-hours per day for **immediate** use. Also, rarely does a trained radiologist remain in the hospital on a 24-hour basis.

There are only a few hospitals in the state which can meet the Category I as outlined in our chart. In the guidelines as set by the AMA Council, I doubt if we have a Category I hospital in the state since this would require a "full time" duty of a trained staff physician with the same authority as other hospital department heads. Therefore, these

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			Supervision									
	Immediate Care	Type of Emergencies	Physician Specialists Available	Nurse	Physician	Consultants	Blood Bank	Lab	X-Ray Angiography	OR	Rec. Rm	Staffed Trained Personnel
I Comprehensive Emergency Service	X	All	O GS-VS TS-Open Heart± GU Anes. IM-Cardiology Ped. Neuro.	Trained RN	Full Time ER	20 Min.	Hospital Immediate	Hospital Immediate	20 Min. Service Radiologist	20 Min.	Staffed	X
II Major Emergency Service	X	Most	O GS-VS GU Anes. IM-Cardiology Ped. Neuro.±	Trained RN	Weekend & Night Full Time	20 Min.	Hospital Immediate 20 Min.	Hospital Immediate	20 Min. Radiologist	20 Min.	Staffed	X
III General Emergency Service	X	Some	GS Anes-Nurse	RN	On Call	Area	30 Min.	30 Min.	30 Min. No Arteriography ? Radiologist±	20 Min.	Staffed	X
IV Basic Emergency Service	X	Aid Station Life Saving	GP Some Surgery	RN LPN	On Call	Area	X	X	Technicians	20 Min. X	±	?±

guidelines have been altered slightly to a more practical level.

Implementation of Categorization

The general concept of hospital categorization has been approved by the Alabama Chapter of the American College of Surgeons and by the Alabama Hospital Association. It is well recognized that categorization in and of itself does not necessarily improve the quality of the care provided. It can be of assistance in improving the quality of care if an evaluation survey based on the guidelines is conducted initially and continued periodically to determine quality improvements. Maximum cooperation between the **planning** council and state and area wide health planning agencies should be encouraged.

There will be some problem in determining the optimum number of categorical emergency facilities for a specific community. Back up facilities available in the community including transportation systems to and from the institution and communications linkages between institutions and emergency agencies including ambulances, fire departments, and police authorities may provide obstacles which will have to be corrected. Economic impact on hospitals to advance in category will be a major factor.

Summary

The basic concept of hospital categorization is a good one. It must be implemented in the spirit of improving patient care by upgrading our emergency care. Implementation has some problems but these can be overcome with cooperation of the many people involved in the care of the injured patient from the site of injury to definitive care. A chart briefly outlining the different areas of care that must be necessary for good care of the acutely sick is included. It is hoped that each hospital who cares for emergency patients will strive to be in as high a category as is reasonably feasible.

References

Categorization of Hospital Emergency Capabilities - AMA Booklet - 1971

Letters to the Editor

Dear Sir:

I am writing to comment on the article, Methohexital In General Anesthesia, written by W. R. Anderson, M. D. and J. D. Nettles, M. D. which was published in the January 1974 issue of the Journal of the Medical Association of the State of Alabama.

I am led to comment because I feel that the article is extremely misleading in many aspects.

Pharmacologically, Methohexital is classified as a sedative-hypnotic and only in the most liberal classifications could it be considered an anesthetic. Its primary function in anesthesia should be as an intravenous induction agent to be used with a more potent agent for the maintenance of anesthesia. Drs. Anderson and Nettles imply that they have used this drug as the only agent in very major and significant surgical procedures, since there is no mention of the use of muscle relaxants, other inhalation agents and only an inference that nasal oxygen was administered in all cases. Taylor and Stoelting stated in *Anesthesiology* in 1960 that "The drug was an ideal preparation for rapid induction of hypnosis when inhalation anesthesia of cyclopropane, ether or halothane was anticipated."

The statement by Anderson and Nettles that methohexital is an oxygen carrying barbiturate and should be the drug of choice for general anesthetic in cardiopulmonary diseases is absurd. Since methohexital is classified as an "oxy-barbiturate" chemically, I can only imagine that the authors erroneously understood this to mean that it increased the amount of "useful" oxygen carried to the tissues. Taylor and Stoelting state that "Respiratory depression is more severe with the use of methohexital than with thiamyl or thiopental at a similar level of narcosis. The physician who uses this drug must be familiar with the techniques of assisted or controlled ventilation."

(Continued on Page 576)

Integument!

ur skin—the human integument -covers us, defines us, protects s. But skin is subject to cuts, urns, abrasions. And infections. leosporin Ointment fights ıfection by providing broad ntibacterial action against sus- eptible skin invaders. It contains ntibiotics that are rarely used ystemically, reducing the risk f sensitization.

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Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

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PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

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A vehicle exists today to help combat these staggering problems—The American Trauma Society (ATS). ATS will do for the Accident victim what the American Heart Association and the American Cancer Society have done for victims of heart disease and cancer.

Efforts to develop an Alabama Chapter of ATS are currently underway by MASA's Emergency Medical Services Committee and the Alabama Committee on Trauma of the American College of Surgeons. Please join our efforts to help create a loud voice with a goal of eliminating accidental death and disability for Alabamians.

For further information contact:

Alan R. Dimick, M. D., Chairman
MASA's EMS Committee
Department of Surgery
UAB, University Station
Birmingham, Alabama 35294
Phone: 934-4903 or MIST Line

SIGHTS AND SOUNDS

A Firm Hand, available for sale and rental through Association-Sterling Films, 866 Third Avenue, New York, New York, 10022, is a hard-hitting, 28-minute color dramatic film which features an executive and a blue-collar supervisor, both victims of alcoholism, and ways of dealing with the problem.

The staggering annual bar bill to industry of over eight million dollars points up a national crisis, the urgent need to treat the addiction as the fourth major health threat and elimination of the conspiracy of silence.

Among the tragic revelations are the shocking number of traffic fatalities attributable to drinking, the appalling rise of alcoholism among wives, and the disastrous major decisions which might have been made by statesmen and executives while under the influence of alcohol.

Based on several years of research and clinical experience, it alerts executive, union and supervisory personnel to the early symptoms of incipient problem drinking and demonstrates some ways of dealing with such employees.

A Firm Hand also reveals an unusual affiliation whereby hard-headed business sense and humanitarian motivations can converge and work together for the good of the company and the individual.

CHILDHOOD CANCER, CURRENT OUTLOOK, 25 minute, sound film, produced as kinescope recording of discussions among outstanding physicians and others knowledgeable in field of cancer management (Drs. Lemuel Bowden, Lester W. Martin, Melvin Tefft and Lois M. Murphy), Borrow from AMA or National Medical Audio-Visual Center (NMAVC), Station K, Atlanta Ga. 30324.

MEDICO - LEGAL DIALOG

"FIRE, PESTILENCE, FLOOD AND MEDICAL MALPRACTICE SUITS"

Truman Hobbs

A couple of years ago at the request of the Alabama Bar Association, I went to the University of Alabama and Cumberland Law Schools to talk to the graduating law students about the Alabama bar examinations. To say a good word for bar exams to students on the eve of taking them is comparable to urging the benefits of capital punishment on death row.

Now at the request of your editor, I find myself writing in this doctors' publication, in part at least, to say a good word for medical malpractice suits. Some lawyers never learn.

The Code of Hammurabi, four thousand years ago, exacted damages from the physician. Even the most concerned modern doctors would agree that our malpractice procedures and penalties are an improvement.

> "If the surgeon has made a deep incision in the body of a free man and has caused the man's death, or has opened the caruncle [sic]in the eye and so destroys the man's eye they shall cut off his fore-hand." The Babylonian Law, Sec. 218, p. 81

Doctors may acknowledge that the pestilence of malpractice suits have plagued their profession for a long time, but the feeling exists among many doctors that medical malpractice suits are today epidemic and are the creatures of litigation-hungry plaintiff lawyers.

Although ten thousand medical malpractice cases were reportedly filed last year in the United States, a few states account for well over half of these cases. For example, California reports twenty-five hundred pending medical malpractice cases. Even these nationwide statistics must be kept in perspective. An article by Fraser Kent appearing in the Birmingham News, January 4, 1974, quoted the American Medical Association, deploring "the exaggerated fears" of many doctors concerning medical malpractice suits. The American Medical Association stated that claims against doctors are four per million doctor-patient encounters. Since the percentage of claims that actually go to trial is substantially less than one in ten, the chance of a medical malpractice suit in the United States is less than four per ten million doctor-patient encounters. Even so, as a doctor you may feel you want better odds. As an Alabama doctor, you have better odds.

A former President of the Medical Association of Alabama was widely reported in 1971 in the press to the effect that Alabama doctors are besieged by "trigger happy" lawyers who file malpractice suits quicker than the Western hero can say: "Reach for your gun." Of course, if you have ever been sued even once, it is natural to think the medical profession is under seige. It is important, however, to keep some things in perspective about medical malpractice suits.

In response to the charge of "trigger happy" lawyers, the Alabama Bar Association did a survey. It wrote the circuit clerks of every county in the State to inquire as to the number of judgments against doctors in their respective counties for the preceding three years and the number of cases filed. The Bar received a response from forty-seven counties including all of the larger ones. Three judgments were reported against doctors in three years, and one of these was by consent; fifteen judgments were in favor of the defendant doctor.[1] Objectively viewed, three adverse judgments in three years in

(Continued Next Page)

the entire State of Alabama, or one a year for each of the past three years, hardly impresses as an epidemic. Moreover, many of the county clerks sent in the unsolicited information that their counties had never had a medical malpractice suit. The survey reported only eight pending medical malpractice suits in all of the forty-seven counties.

If the more than three thousand lawyers in Alabama are eager for medical malpractice cases, this State's legal profession should require psychiatric care for acute frustration.

The truth is that medical malpractice cases are not yearned for by most lawyers—not even by most lawyers who normally represent plaintiffs in damage suits. The cases are difficult and costly to prepare, and in most cases the plaintiff's lawyer has to bear the expense of depositions and expert witness fees in addition to many dozens of hours of the lawyer's time. On an average, medical malpractice cases are far more expensive for the plaintiff's attorney in time and money than other cases. Also as the survey makes clear, the batting average of the plaintiff in medical malpractice cases is extremely low. This fact is evidence of the high regard of the people of this State who serve on juries for the Alabama doctor.

Another strong deterrent to a lawyer being eager for medical malpractice suits is the personal relationship between lawyers and doctors in nearly all the counties in this State. Most lawyers are keenly aware of the anguish and damage done to a doctor from bringing a malpractice suit. Most lawyers are extremely reluctant to do so. Every experienced trial lawyer can tell of a dozen medical malpractice cases he has declined to handle for each case that he has undertaken.

Most of the cases that he turns down he probably does so because he determines that they are without merit. But sometimes he declines to handle such cases when he wonders if he is being true to his obligation as a lawyer. Numerous times lawyers from other counties have called my firm to ask that my firm undertake a medical malpractice case against a local doctor. Most often, this firm has declined the proferred cases—not always because it lacked merit. Sometimes the cases were declined because of friendship for the doctor, sometimes because of the expense, distance involved or other difficulties.

When doctors discuss malpractice cases, they generally assume that they are without basis, but when doctors are discussing cases of negligent surgery or treatment they candidly concede that a substantial number of patients are the victims of medical or hospital negligence.

Dr. Paul Howley, former Director of the American College of Surgeons, has stated:

> "One-half of the surgical operations in the United States are performed by doctors who are untrained, or inadequately trained to undertake surgery."

I have no basis for agreement with this depressing appraisal, but it highlights the fact that there is a broad area for legitimate complaints, and the Bar is not faithful to its obligation if it ignores the public's need for legal representation in some malpractice claims.

I have not tried a medical malpractice case in a quarter of a century of trial practice, but I have had patients or other lawyers consult me where inadvertently the doctor left a rubber glove tied around and blocking the intestine, where the doctor purportedly doing an appendectomy cut the intestines and did not remove the appendix though reporting otherwise to the patient, where the doctor inadvertently stitched the intestine totally closing it off, where the doctor or the hospital applied the wrong material in making a cast and the patient suffered severe burns from his shoulders to his hips. The parade could go on—not to try to prove that doctors are poor practitioners of their art, but to remind us that even among skilled practitioners, mistakes are made.

"A rose by any other name" may smell as sweet, but one of the great disservices to the defendant in a malpractice suit is the legal term "malpractice." The stigma for

(Continued on Page 574)

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Internist, board-certified with endocrinology subspecialty desires association with other internists in Birmingham area beginning July, 1974. Please apply Box D, 19 South Jackson Street, Montgomery, Alabama 36104.

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CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults – 600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children – 3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
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The Weight of Professional Opinion

It's time for action to defend the laws and regulations that protect your patients against drug substitution.

These professional and trade organizations are united in supporting antisubstitution statutes and regulations:

- The American Academy of Dermatolog
- The Board of Directors of the American Academy of Family Physicians
- The Executive Board of the American Academy of Neurology
- The Committee on Drugs of the American Academy of Pediatrics
- The American College of Allergists
- The Executive Committee of the American College of Obstetricians and Gynecologists
- The Board of Regents of the American College of Physicians
- The Board of Trustees of the American Dental Association
- The Board of Trustees of the American Medical Association
- The American Psychiatric Associatic
- The Executive Committee of the National Association of Retail Druggists
- The Board of Directors of the Pharmaceutical Manufacturers Association
- The National Wholesale Druggists' Association

Joint Statement on Antisubstitution Laws and Regulations

The purpose of this statement is to affirm the support of the participating organizations for the laws, regulations and professional traditions which prohibit the unauthorized substitution of drug products.

Traditionally, physicians, dentists and pharmacists have worked cooperatively to serve the best interests of patients. Productive cooperation has been achieved through mutual respect as well as a common concern for the ideals of public service. This mutual respect has been reflected, in part, by joint support over the years for the adoption and enforcement of laws and regulations specifically prohibiting unauthorized substitution and encouraging joint discussion and selection of the source of supply of drug products. The basic principles of medical, dental and pharmacy practice are thus utilized and preserved in the interest of patient welfare.

The antisubstitution laws have not obstructed enhancement of the professional status of pharmacy any more than they have in and of themselves guaranteed absolute protection from unsafe drugs, or freed physicians, dentists and pharmacists from their responsibilities to patients. As a practical matter, however, such laws and regulations encourage interprofessional communications regarding drug product selection and assure each profession the opportunity to exercise fully its expertise in drug usage, to the advantage of patients.

Physicians and dentists should be urged to increase the frequency and regularity of their contacts with pharmacists in selection of quality drug products, recognizing that economies to patients can be improved through such communication, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selection remain primary and do not permit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthorized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

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ecautions—Toxic amblyopia has been reported h long-term continuous use of ethchlorvynol. rmanent visual defects have been observed, alough amblyopia has improved after discontinuan of the drug. Drug dosage should be limited elderly and debilitated patients to the smallest ective amount. If pain is present, this drug ould only be given if insomnia persists after n is controlled with analgesics. Caution is aded in prescribing the drug for patients who are ng treated with either MAO inhibitors or antipressants. Transient delirium has been reported h the combination of Placidyl and amitryptyline. ıg dosage should be reduced if prescribed for ients receiving MAO inhibitors or antidepresıts. Caution should be exercised in patients h impaired hepatic or renal function. Patients o respond unpredictably to barbiturates or alco, or who exhibit excitement and release of inhion in association with such agents, may also ct in this way to Placidyl. Rarely, patients may ıibit symptoms suggestive of an unusual susotibility to the drug; such as prolonged hypnosis, found muscular weakness, excitement, hysteria, syncope without marked hypotension. Transient dlness or ataxia may occur.

verse Reactions—Hypotension, nausea or vomg, gastric upset, aftertaste, blurring of vision, ziness, facial numbness, and allergic reaction ified by urticaria have been reported following cidyl administration. Mild "hangover" and sympıs of mild excitation have occurred in some ents. There have been rare reports of cholestatic ndice occurring in patients taking ethchlorvynol. ew cases of thrombocytopenia have been reted in patients receiving ethchlorvynol. 304431

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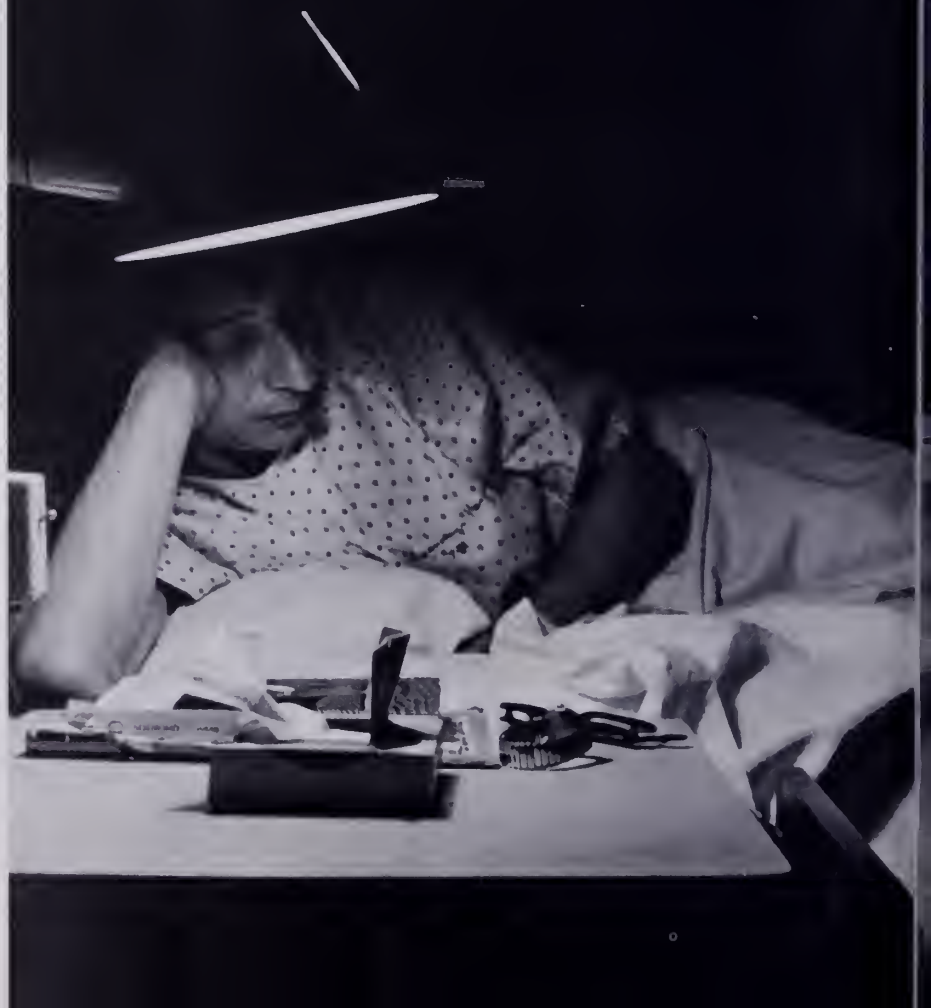

Emergency Medical Services Goals In Alabama For The Immediate Future

Alan R. Dimick, M. D., UAB
Associate Professor of Surgery

and

Miss Ida Martha Reed
Assistant Director for Systems

Emergency Medical Services (EMS) is the joint responsibility of local government and the medical community. It consists of Emergency Medical Technicians (EMT's), vehicles and equipment coordinated and integrated through communications and area wide planning to deliver the acutely ill or injured patient to the nearest, best qualified, and best staffed hospital with emergency facilities. Few such systems in the United States today are fully operational, primarily because of deficiencies in some components (e. g. radio communications), or the virtual absence of component coordination through area wide planning. The development of EMS systems has not paralleled that of fire fighting and law enforcement systems. However, since World War II the development of modern transport, radio communications, blood banking, antibiotics, and advanced operative techniques has made area wide EMS systems technologically feasible.

Only in the past few years have the public officials and the medical profession begun to appreciate the potential for salvage of human lives made possible by this new technology and, as a result, acted to mobilize for an organized response to acute illness and injury. Physicians, public officials, legislators at local, state, and national levels are involved in various stages of planning and implementing EMS systems. These signs of activity at all levels of government augur well for the EMS system, an idea which has now come of age.

The role of the physician in the EMS system may be viewed from a variety of prospectives. Historically it was physicians and their professional organizations who:

1. Recognized the need for improved care of the acutely ill or injured.

2. Developed the concept of an emergency medical services system.

3. Publicized the inadequacies of emergency care.

4. Assisted in technological development of the components of the EMS system.

5. Played a major role in EMS system planning at the national level.

6. Played a major role in EMS planning and implementation through participation in emergency health service councils at local, regional and state levels.

7. Became the primary organizers and providers of emergency care within hospital facilities, both in the Emergency Department and in those areas to which the acutely ill or injured may be sent from the Emergency Department, such as the operating room, intensive care unit, or coronary care unit.

TRANSPORT

Transport of the acutely ill or injured was mainly hospital based until World War II. Then with the departure of personnel to the war effort, ambulance service was left by default to any willing group regardless of its ability to provide care. After World War II the lessons in emergency medical care learned by the military were largely ignored. Untrained, unlicensed individuals equipped with hearses, station wagons, or any other back-loading vehicle continued to provide ambulance service. In 1959 the Committee on Trauma of the American College of Surgeons published a list of minimum equipment for ambulances which soon became a national standard. The Federal Highway Safety Act of 1966 contained an emergency medical services standard, which provided allocation of a percentage of each state's highway funds to EMS. In many states these monies have been used to purchase ambulances which met national standards, radio communications, and for training of EMT's.

(Continued Next Page)

TRAINING

With the disappearance of the hospital based ambulance after World War II the relationship between physician and the ambulance driver was severed. The ambulance driver had no contact with physicians and no feedback as to the quality of patient care he provided. Until recent years what little instruction the ambulance driver received in resuscitation was provided for the most part by the Red Cross. Since 1966 many programs have been developed for training of the emergency medical technician (EMT). The 81-hour course developed by Dunlap and Associates for the National Highway Traffic Safety Administration of the U. S. Department of Transportation has been accepted as a national standard. Successful completion of this course prepares the EMT to deal with initial resuscitation and care of the acutely ill or injured.

Recognition that the EMT represents a new health occupation has prompted two important new developments. First is the development in 1971 of a National Registry of EMT's, which through its examinations and evaluation system provide nationally acceptable criteria of competence in this new health service occupation. Second is the publication of guidelines for a two year program for the EMT leading to an associate degree. These guidelines were developed in 1972 jointly by the American Medical Association and the American Association of Junior Colleges. Currently the National Registry of EMT's is developing a career ladder for EMT's to keep these trained personnel in this field.

EMT's should be encouraged to get the basic training as well as advanced training. This is especially important in rural areas where the emergency facilities are sparse and scattered. It is well known that the mortality rate for injuries in rural areas is much higher because of this lack of emergency medical care. Therefore, provision of better trained EMT's in these rural areas would significantly lower morbidity as well as mortality rates in these areas. Coincident with this would be the need for improved radio communications among the EMT, hospital and physician.

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During his training the EMT should work with the physician and nurse at his local hospital, where each will learn and come to respect the others knowledge and capabilities. Such coordinated activity welds together a team which results in the provision of better emergency care before the patient reaches the hospital as well as after he reaches the hospital.

There is also a need for training programs for physicians and nurses who work in hospital emergency departments. The Alabama Committee on Trauma of the American College of Surgeons is attempting to stimulate local as well as state-wide programs for such training. Some areas in the State are already providing such programs - e. g. - Opelika and Mobile.

COMMUNICATIONS

The technology of radio communication was well established during World War II by the military and used even before that time by most police and fire departments in the United States. At a time when man on earth can communicate with astronauts on the moon and taxi services can converse by radio with their central dispatcher, it is indeed unfortunate for the acutely ill or injured patient that few ambulances have a central dispatch system or the ability to communicate with hospitals, or that few hospitals are equipped to communicate with each other. Recently the Federal Communications Commission has taken steps aimed at clarifying the allocation of radio and telemetry frequencies for ambulances and hospitals. As mentioned above there is need for improved radio communication both in the rural areas as well as in the more metropolitan areas. There is a need for local, regional and state wide EMS communications planning so money will not be spent for inappropriate and inadequate radio systems. Currently there is no such coordination at these levels.

UNIVERSAL EMERGENCY NUMBER

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(Continued on Page 561)

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Traumatic Rupture of the Thoracic Aorta

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Introduction

Approximately 40 per cent of major injuries resulting from vehicular accidents involve the thorax and its enclosed viscera. One of the most lethal of thoracic injuries is rupture of the aorta. About 80 per cent of patients with traumatic aortic rupture die of massive hemorrhage before reaching a hospital.[1, 2] However, there are a significant number of patients fortunate enough to reach a hospital who then may present major problems in diagnosis and management. About six such patients are seen in our institution yearly. In addition, a number of patients presenting enlarging aneurysms of the descending thoracic aorta have a history of decelerative trauma predating the observation of the aneurysm.

Case Report

R. W., a 16 year old white male, was admitted to this hospital March 2, 1970. He was involved in an automobile accident approximately one hour prior to admission. He was not rendered unconscious, but he sustained numerous abrasions and lacerations of his thorax, abdomen, and extremities. The patient complained of some shortness of breath. His blood pressure was 150/100 in the upper extremities. His pulse was 100 and there were no cardiac murmurs. A chest x-ray (Fig. 1) revealed no rib fractures, but a small hemothorax. The left hemidiaphragm was elevated and there was slight mediastinal widening. Based on the history of blunt decelerative trauma to the thorax and slight mediastinal widening, an aortogram was done. (Fig. 2) This showed a pseudo-aneurysm of the isthmus of the descending aorta with suggestion of a pseudocoarctation. An operation was performed shortly thereafter. A left posterior lateral thoracotomy was done and the external iliac artery and vein were exposed for subsequent partial cardiopulmonary bypass. The findings included a minor contusion to the lower lobe of the left lung and a diaphragmatic tear approximately six centimeters long, through which part of the stomach had herniated. The

Fig. 1. - PA chest x-ray showing moderate widening of mediastinum after thoracostomy drainage of small hemothorax.

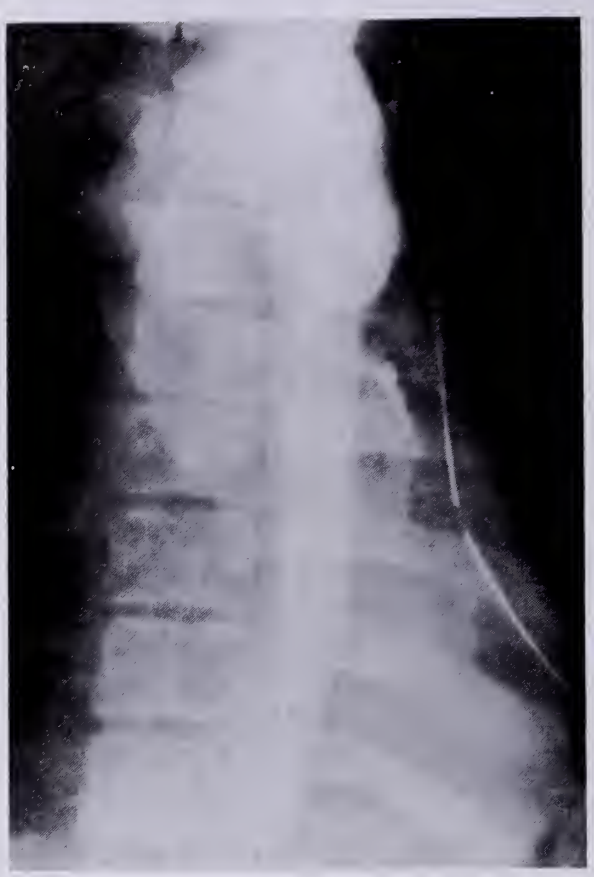

Fig. 2. - AP view of aortogram showing aortic rupture with pseudo-aneurysm and pseudo-coarctation.

spleen was normal. The descending thoracic aorta had a circumferential tear just proximal to the ligamentum arteriosum. The tear involved the intimal and muscular layers and was held intact by the adventitia and mediastinal pleura. The left external iliac artery and vein were cannulated and, using a small disposable oxygenator, femoral-femoral bypass was established at normothermia. The aorta was clamped proximal and distal to the aortic tear and the area resected and replaced with a large Dacron tube graft. The diaphragmatic hernia was repaired, and the patient made an uneventful recovery thereafter.

Pathophysiology

Aortic rupture is the result of blunt, non-penetrating trauma to the thorax. It is the product of our mechanized, vehicular society and occurs in auto accidents, motorcycle accidents, and less frequently in falls from heights and parachute accidents. The mechanical factors leading to disruption of the aorta involve sudden deceleration in the horizontal or vertical plane with development of shearing and traction forces. These forces act around junctions of the fixed and mobile segments of the aortic arch. Thus, the most vulnerable point is the junction of the transverse aortic arch and the descending thoracic aorta at the aortic isthmus, that is at the attachment of the ligamentum arteriosum. Most decelerative accidents occurring in the horizontal plane, that is those occurring in vehicular accidents, involve the aortic isthmus. The less frequent injuries to the ascending aorta usually are the result of falls from heights. Of patients reaching the hospital, the incidence of injury of the aortic isthmus is perhaps 15 times the incidence of injury to the transverse or ascending aorta. The aortic tears are generally linear and involve partial or complete transection of the intima and media of the vessel. The ends of the intima and media retract several centimeters apart, and the discontinuity is retained by a sheath of intact adventitia and mediastinal pleura. This results in expansion into a pseudoaneurysm at the area of the defect. The defect may also evolve into a flap involving a portion of the distal severed end of the intima with resulting angiographic and clinical findings similar to coarctation. Most patients who initially survive rupture of the thoracic aorta may be expected to have delayed rupture within 12 hours to seven days. Some ruptures of the thoracic aorta may become stabilized for 30 days or so and then progress within one to three years to large aneurysms compressing the esophagus and left mainstem bronchus.

TABLE I

Clinical Diagnosis of Traumatic Rupture of the Aorta

History of Blunt Decelerative Trauma

Associated Thoracic Injury

- Fractures of ribs, clavicle, sternum, vertebral body
- Hemo/pneumo thorax, hemo/pneumo mediastinum
- Diaphragmatic tear

Systolic Murmur

BP difference; arm to arm, arm to leg

Transient lower extremity motor nerve deficit

Chest X-ray
- Widened mediastinum
- Tracheal deviation to the right
- Double or triple aortic margin

Angiogram

Clinical Diagnosis

The keystones of the clinical diagnosis of traumatic rupture of the aorta are summarized in Table I. All patients with major blunt trauma to the thorax should be suspect of possible ruptured thoracic aorta. Symbas[3] has stressed a triad consisting of increased pulse amplitude and blood pressure in the upper extremities, decreased pulse amplitude and blood pressure in the lower extremities, and roentgenographic evidence of widening of the mediastinum as helpful in the diagnosis of ruptured aorta. Occasionally, patients will have a systolic murmur heard in the left third and fourth interspaces, both anteriorly and posteriorly, and occasionally there may be transient neurologic disturbances in the lower extremities. Frequently the chest roentgenogram will show hemo or pneumothorax and there will be fractures of the ribs, vertebral bodies or clavicle. Mediastinal widening may be marked or at times only minimal (see Fig. 1), and at times serial chest roentgenograms taken several hours apart will show slight but progressive widening of the mediastinum.

Thoracic aortography is the ultimate diagnostic aid. Aortography is done generally in the left anterior oblique position with the catheter introduced through the femoral artery. Aortography reveals an area of localized dilatation, less frequently an area of disruption unaccompanied by dilatation but accompanied by extravasation of the dye or pseudocoarctation.

Treatment

Demonstration of traumatic rupture of the aorta is an indication for immediate operation in all but a very few patients. There is an occasional patient with associated very severe head injuries or abdominal injuries where thoracic operation may be contraindicated. We have never seen such a patient; however, 13 such patients are included in the Armed Forces study of Flemming.[4] In those patients not operated upon, the Wheat regimen, to lower blood pressure and lower systolic pulse amplitude, may be employed.[5]

In the great majority of patients, operation is the procedure of choice and is associated with a low operative mortality, 7.5 per cent in our series.

The three major problems to be encountered in the operative treatment of thoracic aortic rupture are hemorrhage, paraplegia, and renal shutdown. Catastrophic intraoperative hemorrhage should not occur if dissection of the area of the aortic tear is avoided until after provisions are made for proximal and distal occlusion of the aorta. Adams and Von Geertruyden[6] pay particular attention to the anatomy of the spinal cord in their discussion of paraplegia following aortic clamping or aortic resection. The blood supply of the spinal cord arises from branches of the left subclavian artery, the intercostal arteries, and several branches of the abdominal aorta. Traditionally, a time limit of 15 to 20 minutes has been applied to duration of aortic cross clamping to avoid spinal cord ischemia. Crawford[7] has recently suggested that this maximal limit may be extended by the strict avoidance of intraoperative

hypotension. He states further[8] that the incidence of spinal cord ischemia is directly related to the number of intercostal vessels involved or sacrificed in the resection of the traumatic aneurysm. Acute tubular necrosis may generally be avoided in aortic cross clamping of up to 40 minutes by avoidance of hypotension and adequate preoperative hydration.

The expedient treatment of rupture of the proximal descending thoracic aorta is, therefore, based on satisfactory exclusion of the injured area between proximal and distal vascular clamps. Seldom can the area be simply closed in continuity with sutures. The rupture generally involves the total circumference, or a major portion of it, and the ends of the intima and media are frequently separated by several centimeters. However, with adequate mobilization this ruptured area may be resected and occasionally anastomosed in a primary fashion. Frequently, the continuity must be reestablished with a length of woven Dacron tubing. Occasionally, in our hands, the situation has permitted aortic cross clamping without adjuncts to prevent spinal and renal ischemia. In most cases, however, operation is done either with a temporary shunt of silastic tubing or with the aid of some form of cardiopulmonary bypass.

A quite satisfactory shunt may be constructed using an 18 inch length of six millimeter internal diameter silastic tubing. The ends are introduced proximally and distally to the aortic cross clamps through purse-string sutures. Heparinization is not needed and adequate blood flow to the distal thoracic and abdominal aorta is maintained. Hughes[9] has suggested that a mean arterial blood pressure distal to the aortic cross clamp of 50 mm. Hg. or more virtually guarantees protection of spinal cord and renal function.

Partial cardiopulmonary bypass involves the use of a roller pump and an oxygenator-reservoir. Blood is removed from the iliac vein and returned through the iliac artery. This assures satisfactory blood flow to the viscera and spinal cord but requires total body heparinization. Thus, this method is generally not applicable to patients with associated injuries of the abdomen or head and neck. Monitoring of arterial pressure by indwelling cannula in the right radial artery is absolutely essential.

Injuries of the ascending aorta must by necessity be treated with full cardiopulmonary bypass.

Summary

Survival of patients suffering traumatic decelerative injuries to the thoracic aorta depends on a high index of suspicion leading to a diagnosis confirmed by aortography. Operation is generally successful when provisions are made to avoid intraoperative hypotension and when adjunctive measures are employed to prevent renal and spinal cord ischemia.

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1. Charrette, R. R., Lynn, R. B., and MacArthur, R.: Traumatic rupture of the thoracic aorta. Canad. J. Surg. 15:350, 1972.

2. Parmley, L. F., Mattingly, T. W., Monion, W. C., et al. Circulation 17:1086, 1958.

3. Symbas, P. N., Tyras, D. H., Ware, R. E., et al.: Rupture of the aorta. Ann. Thorac. Surg. 15:405, 1973.

4. Flemming, A. W., and Green, D. C.: Traumatic aneurysms of the thoracic aorta: Report of 43 cases. Soc. Thoracic Surgeons, (January) 1974 (abstract).

5. Palmer, R. G., and Wheat, M. W.: Treatment of dissecting aneurysms of the aorta. Ann. Thorac. Surg. 4:38, 1967.

6. Adams, H. D., and Von Geertruyden, H. H.: Neurologic complications of aortic surgery. Ann. Surg. 144:574, 1956.

7. Crawford, E. S., and Rubio, P. A.: Reappraisal of adjuncts to avoid ischemia in the treatment of aneurysms of descending thoracic aorta. J. Thorac. Cardiovasc. Surg. 5:693, 1973.

8. Crawford, E. S., Fenstermacher, J. M., Richardson, W., et al.: Reappraisal of adjuncts to avoid ischemia in treatment of thoracic aortic aneurysms. Surgery 67:182, 1970.

9. Hughes, R., and Reemtsma, K.: Correction of coarctation of the aorta: Manometric determination of safety during test occlusion. J. Thorac. Cardiovasc. Surg. 62:31, 1971.

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ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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(Continued from Page 551)

ices he requires. This would include police, fire, emergency ambulance service, wrecker service, etc. Certain areas in our state already have implemented this service - e. g. - Jefferson and Shelby Counties, Alexander City, Clanton. Such a universal emergency number is needed to ensure that the patient who needs emergency care will know how to call for it.

HOSPITAL FACILITIES

With area wide planning of emergency services, patients need no longer be delivered to the nearest hospital but to the best and most appropriate emergency care facility. Categorization of a hospital's ability to provide emergency care is an essential step in determining which hospital should receive the acutely ill or injured. Emergency facilities are costly and duplication should be avoided to reduce the financial burden on the community.

Categorization of hospitals according to their ability to provide emergency health services received a strong stimulus when the conference on categorization of hospital emergency capabilities, sponsored by the American Medical Association in 1971, promulgated guidelines. Comprehensive health planning agencies at the state and regional levels are now using categorization data in the development of area wide EMS planning.

CAUTION: Unless physicians exert enlightened leadership at the state (a) and (b) comprehensive health planning levels and in the corresponding EMS councils at the (a) and (b) levels, many decisions will be left in the hands of professional bureaucrats and consumers who may have little operational knowledge of what is in the best interest of patient care. By fully meeting his responsibilities, the individual physician has a great opportunity to exercise some control over the development of the EMS system and over his own working environment in the hospital emergency department.

LEGISLATION

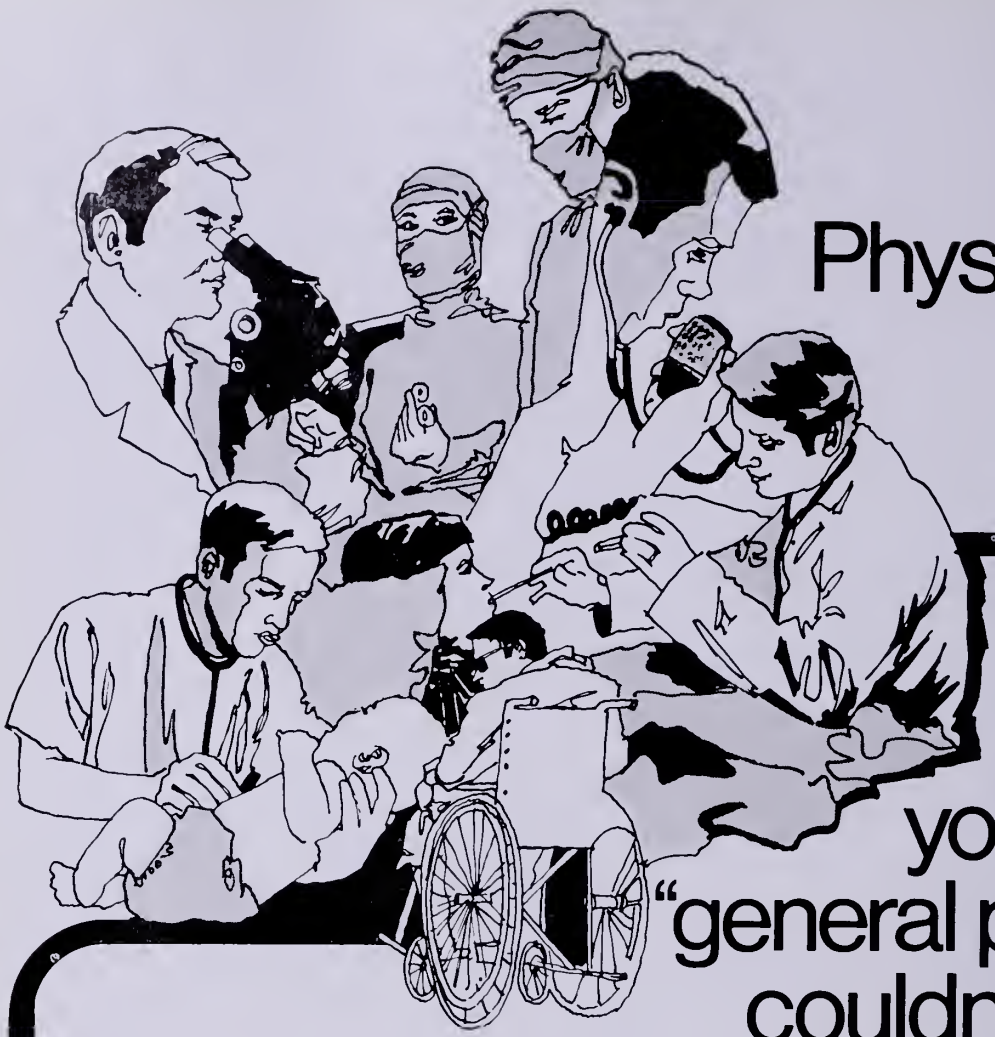
There is a definite need in Alabama for permissive legislation to allow cities and counties to provide emergency ambulance service to their citizens. Such a bill passed the State House of Representatives in 1973 but died in the Senate. According to the League of Municipalities this legislation is needed so that the city and county officials can ensure that adequate emergency ambulance is provided for their citizens.

Also, there is a definite need for adequate funding for the State Division on EMS in the State Health Department so that they can supervise state wide training of emergency medical technicians as well as assistance in planning and coordination of EMS systems throughout the State.

THE PHYSICIAN'S ROLE OUTSIDE THE HOSPITAL

Outside the Emergency Department and hospital a physician must actively support and influence the development of the EMS system and its components. He can do this by contributing to the training of emergency medical technicians and providing each EMT with feedback regarding quality of patient care given enroute to the hospital. The information provided by the trained EMT regarding significant changes in signs (such as pupil reaction or level of consciousness) that have occurred from the time of acute illness or injury until hospital arrival is important to the physician in diagnosis and management. The physician must also participate in or organize an operational EMS council, through which he will have input into the development of area wide planning of emergency medical service. Such councils need physician leadership and guidance.

When he has taken the above steps the physician can assure the public and public officials in good conscience that he and the medical profession have worked for improved communications and transport systems for the acutely ill or injured, that patients will be delivered to hospitals where their problems can be adequately managed, and that these desirable goals will be achieved without costly duplication of facilities, arbitrary imposition of bureaucratic edict or political expediency.



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Mobile is probably the best kept secret in the South. It is one of the most pleasant places in which to live and acts as a fount for commerce as well as a conduit for visitors from the central states to the southeast.

Since 1972 there has been an increased emphasis on the development of emergency medical services, and to place the Alabama Gulf Coast into some emergency posture for not only major natural disasters but also the day-to-day emergency medical disasters that happen to each and every individual.

In March 1972 a plan was drafted. This plan was designed to develop an Emergency Medical Services Program. It was to be used as an adjunct to the already established Emergency Preparedness Plan of Mobile County. This plan is divided into three phases: I Education, II Coordination, and III Implementation.

I. Education, as you well know, is the "sine qua non" of all medical care. Without the provision of an intellectually sophisticated and ethically oriented individual as the primary focus of emergency care, one does not have a good system.

The first effort in education was to orient and educate the personnel on hand; those which actually provide emergency medical service on a day-to-day basis. These individuals, the policemen, the combat firemen, the ambulance attendant, the industrial safety officer, Red Cross workers, teachers, and school health nurses were the beginnings of the Mobile County Emergency Medical Services System Educational Development.

Since the institution and training of the Emergency Medical Technician Course at the Mobile General Hospital in Mobile, 117 graduates have matriculated from the 80 hour Dunlap EMS Course.

Nursing education in emergency services has also been effective. Twenty-five nurses from the tri-county area of Baldwin, Mobile and Escambia County were trained at the Mobile General Hospital in January and February of 1973. A like class planned in emergency room services as well as experience in the emergency room is to be held during the months of March and April 1974.

Physician education is equally important. This has been started in the Mobile County area by having special speakers in Emergency Medical Services within the nation come and speak to the Medical Society.

In February 1973, Dr. Roy Baker of Jacksonville, Florida spoke to the Medical Society about the development of the Emergency Medical System in Jacksonville, Florida— In April 1974, we hope to have a discussion of prehospital coronary care from Dr. Richard Crampton from Charlottesville, Virginia.

Continued cardiopulmonary resuscitation training is required for attendance on hospital staffs in the Mobile County area.

The next goal in education in Mobile County is the development of a very sophisticated paramedical force within the local fire department. This training should begin within the near future.

As you can see from the above, education; being the crux of the matter, is the area which Mobile County has placed its greatest emphasis in the emerging emergency medical service plan.

II. Coordination is a very key effort also. Coordination began by the development of a local Emergency Medical Services Council. This is a lay and professional council which advises studies, plans and helps coordinate and implement those EMS plans.

(Continued on Page 569)

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ecautions: In elderly and debilitated, limit dosage to smallest ective amount to preclude development of ataxia, oversedan or confusion (not more than two capsules per day initially; rease gradually as needed and tolerated). Though generally t recommended, if combination therapy with other psychopics seems indicated, carefully consider individual pharmaogic effects, particularly in use of potentiating drugs such as AO inhibitors and phenothiazines. Observe usual precautions presence of impaired renal or hepatic function. Paradoxical ctions (*e.g.*, excitement, stimulation and acute rage) have en reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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CONTINUING MEDICAL EDUCATION

A Review of Proposed CME Requirements

Larry Dixon

The action regarding CME requirements for Association membership taken by the Reference Committee C at the 1973 Annual Session is of much importance as we approach the 1974 Annual Session. At this meeting the College of Counsellors and House of Delegates must make the final decision for this Association. The following review of CME requirements is designed to provide Alabama physicians with pertinent facts on the issue.

Following much study and discussion over a period of years, the Medical Education Committee voted to go on record as favoring continuing medical education requirements for membership in MASA. With the unanimous support of this committee an ad-hoc committee was formed to prepare the particulars of the proposed requirement. After approval by the Education Committee the ad-hoc committee's ideas were drafted in the form of a resolution to amend the Constitution and submitted at the 1973 Annual Session.

The Reference Committee heard considerable testimony about "Resolution 12," and by a four-to-one vote presented the following recommendation:

"Mr. Chairman, Reference Committee C recommends that Resolution No. 12 be approved as amended to read: That Article IV - Members, be amended to create Section 5 which shall read:

Membership in the Medical Association of the State of Alabama is dependent upon the continuing medical education requirements as specified in the By-Laws."

The dissenting committee member filed a minority report in which he emphasized his fear of such a requirement becoming a "disuniting force." He believed in the need for CME but also believed unity was the most important issue facing organized medicine and he did not wish to chance a disruption.

The Board of Censors concurred in the action taken by the Reference Committee. Such action was taken and the resolution was automatically tabled for the prescribed year—a year which ends in Huntsville.

Next month at the 1974 annual meeting a decision will be made. Before that decision is made some pertinent questions must be answered. These questions are concerned with the particulars that will appear in the By-Laws. In this article I am presenting the specifics exactly as they will appear in the By-Laws should Resolution 12 be adopted by the Association at its 1974 Annual Session.

I

Classification of Members Affected

All members of the Society will comply with this charge, except those retired from practice, those still engaged in their formal medical or specialty education, nonresident members and those in full time administrative positions upon recommendation of the Committee on Medical Education. Those members unable to fulfill requirements because of impaired health or extenuating circumstances may be exempted on a temporary basis by the Board of Censors.

II

Table of Organization

The Committee on Medical Education will act as the central authority and be charged with crediting individuals who provide evidence of having the required education hours of credit. To this end it may seek support

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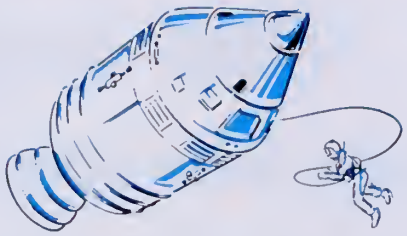

Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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(Continued from Page 563)

The council is directly responsible to the Mobile County Commission.

The Mobile County EMS Council began in July of 1972 and met for the first time in October 1972. Since that time, this body has developed plans in emergency medical communication, airport disaster, fire rescue service, school notification and tornado evaluation for schools, and a disaster plan for the Senior Bowl that occurs in Mobile each year.

III. Implementation of the ideas and concepts of the developing EMS System is obviously the most critical and the most difficult. To implement, one must have funds to provide the mechanism by which the concept can be carried out.

Fortunately the educational program has been implemented with minimal costs. The training of the 117 EMT's cost less than $3,000.00. The funds have been obtained by the use of a registration fee and volunteer services from the medical profession for training.

The Senior Bowl Plan has been carried out on two separate occasions with complete volunteer medical support and equipment.

To implement a comprehensive emergency medical communications plan, the hospitals, because of their concern, purchased their own base station radios and opened the emergency medical radio net in October of 1973.

The Fire Rescue Service was philosophically recommended in November of 1972. A complete plan recommended in October 1973, will begin with the allocation of salaries for personnel in the Mobile City Fire Department in April 1974. Training should start for the paramedical personnel soon thereafter.

In summary, the urban development of an Emergency Medical Service System in Mobile is a very simple three phase plan. The greatest emphasis should be and will be placed on education of personnel that provide the service. A coordinating agency with strong medical supervision and interested lay personnel in a council will hopefully implement a plan in which each citizen can gain access into the emergency medical system and be given adequate, sophisticated, physician-supervised, emergency medical care.

Phillip A. Snodgrass, M. D.
Chairman,
Mobile County Emergency
Medical Services Council

If You Yelled Help—Would Anybody Answer?

One bitterly cold day in Chicago recently, a 22-year-old nurse struggled to escape the Lake Michigan waters into which she had fallen, near the shore. An elderly man reached out to her, but couldn't make contact. He asked a man walking by to help. The man kept walking—and the nurse drowned.

On a San Francisco street corner, a young woman was left bound and gagged, in full view of pedestrians and motorists. Nobody stopped to help.

Then, of course, there was the famous case of Kitty Genovese, the Queens, N. Y., woman stabbed to death a decade ago before 39 onlookers, none of whom bothered to help her, or to seek aid.

Those incidents involved average Americans who, obviously, were not suited to the Good Samaritan role. But now comes a study in which that role was spurned by persons training to become professional advocates of Samaritanism—theological students. In fact, some were concentrating on the Samaritan story just before being tested.

The Princeton University study, by psychologists Drs. John M. Darley and C. Daniel Batson, utilized 40 unwitting theology students.

(Continued on Page 572)

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Precautions: As with other thyroid preparations, an overdosage of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's Disease (chronic adrenocortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to p with cardiovascular disease; developm chest pains or other aggravations of car cular disease requires a reduction in dos

Contraindications: Thyrotoxicosis, acute m dial infarction. **Side effects:** The effects c THROID (sodium levothyroxine) therapy a in being manifested. Side effects, when t occur, are secondary to increased rates c metabolism; sweating, heart palpitation or without pain, leg cramps, and weigh Diarrhea, vomiting, and nervousness ha been observed. Myxedematous patient heart disease have died from abrupt inc in dosage of thyroid drugs. Careful obse of the patient during the beginning of a roid therapy will alert the physician to a toward effects.

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2 Because T_4 converts to T_3 at the cellular level, it provides full thyroid replacement at maintenance doses.[1, 2]

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4 *Synthroid* is assayed chemically; no biologic test is necessary to measure potency.

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1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. 49:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

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(Continued from Page 569)

As the students walked individually across campus they encountered a groaning, coughing "victim" slumped in a doorway. And 60 per cent of the students kept right on walking.

Prior to this, the students were asked to prepare a short talk on a specific topic, some on vocations and others on the Biblical parable of the Good Samaritan. Then they were told to go to another laboratory to tape the speech, and also were told:

That they were late for the taping session (classified as a high-hurry condition); or that they were expected momentarily (intermediate-hurry condition) or that they could take their time (low-hurry condition).

The hurry-condition was a major factor in the decision to stop and help. Of the 16 students (40 per cent) who stopped, about two-thirds were low-hurry subjects.

"A person *not* in a hurry may stop and offer help to a person in distress," concluded the psychologists. "A person *in* a hurry is likely to keep going. Ironically, he is likely to keep going even if he is hurrying to speak on the parable of the Good Samaritan, thus inadvertently confirming the point of the parable."

For some of the students, they said, the emergency appears to have posed a conflict between helping and getting to the taping session.

Consequently, they arrived at the laboratory "aroused and anxious" and "conflict, rather than callousness, can explain their failure to stop."

What do actual incidents of indifference, and studies like the preceding (the San Francisco episode also was staged to test reactions) say about our society? Why do some people just walk on by and ignore someone in distress, or even danger of death?

Basically, says Dr. Daniel X. Freedman of Chicago, such behavior reflects "the lack of community in our society, the lack of confidence and trust, and the lack of knowing how to behave."

"The behavior rules are shifting," said Dr. Freedman, chairman of the Department of Psychiatry at the University of Chicago.

"Cultural norms of how to behave have begun to break down. For example, you rarely see here what you see in Latin countries, where if a child misbehaves, an adult stranger feels entirely secure in correcting him. This was the case in our neighborhoods at one time. People simply tried to help set a tone of behavior, because they believed they were linked to each other in some kind of way. We have lost that sense of community in our highly mobile society."

As for helping in emergencies, he said:

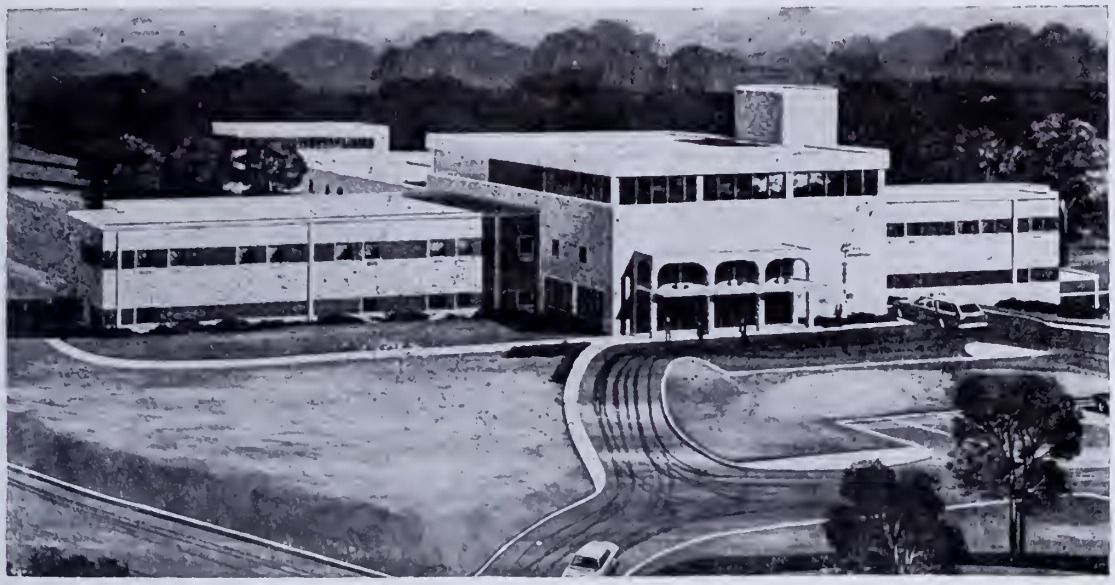
"It often isn't just a question of the potential helper being afraid to take action, but also fear that the agencies he might rely on, such as the police, might get him into trouble. In the Queens case, some people said they did not want to get involved with the police.

"We have been slow to grasp that idea—it is only recently that various agencies have been saying things like, 'Look, we'll give you a number to call and you can turn in a drug pusher and remain anonymous.'"

"That is an attempt to treat the fear of involvement. In the long run, if people can't or won't speak up for what they think is right, we have a problem."

There is a striving for a return to a "sense of community," as evidenced by the formation of various groups, including the shrill ones, Dr. Freedman said. "Neither family nor religion have the role they used to have," he added. "Something must replace them."

(Continued on Page 574)



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(Continued from Page 572)

Will we get "back to goodness," so to speak?

"We will get there," Dr. Freedman said, "because of the simple fact that in order for people to live with one another they have to have trust and rules of conduct. Because the need for mutual support is really a biological need. And because a lot of the depersonalization in our society does repel us. We will get there. We have to."

(Continued from Page 542)

one losing a malpractice case is that he is bad, incompetent and unsuited for his profession. One mistake or one negligent act does not make me a bad lawyer or you a bad doctor. Indeed, if there is a lawyer who maintains he has never made a mistake or committed any professional act of negligence, I suspect we have a lawyer young at the trade or extremely forgetful.

Keeping malpractice suits in perspective, it is important also for doctors to remember that they are not the only ones subject to such suits. Architects, lawyers, pharmacists, engineers, contractors, and cobblers are a few examples of persons subject to such suits. In the case of the cobbler, of course, the suit is probably cast for negligent repair and is limited by the value of the shoes, but the other examples as with doctors suffer serious concern and great potential damage from malpractice suits. The premiums for a professional liability policy for civil engineers are substantially more than for medical surgeons.

If a lawyer certified to you that you had good title to a residence that you were buying, and it developed that he had negligently overlooked a flaw in the title which cost you thousands of dollars, you would and should feel justified in suing him for your damages. In most cases, his costly insurance would come to his protection without the necessity of a suit. If you had a legitimate claim for damages in an automobile accident, and the lawyer allowed the statute of limitations to run, the lawyer is liable.

Having tried to put the medical malpractice suit in perspective, what are some important considerations if the possibility of a claim arises?

First, promptly notify your insurance carrier. You are required to do so under your professional liability policy. There is a tendency to hope the dark cloud of a malpractice suit will go away and to procrastinate on contacting your carrier. Delay could void your coverage. Write the insurer. You may want to point out that in your opinion the claim is groundless and probably will never materialize, but do not risk loss of coverage by undue delay.

Second, doctors have the protection of a special malpractice limitation period. In 1953 the doctors in Alabama secured a time limitation on medical malpractice suits of two years from the time of the alleged wrongful conduct, or if the cause of action could not reasonably have been discovered within said two years, then the action can be commenced within six months of such discovery, but in no event may the action be commenced more than six years after the alleged wrongful act. Title 7, Sec. 25(1), of the Code of Alabama, as amended.[2]

Third, ordinarily in a malpractice suit in Alabama, proof as to what is or is not proper practice, treatment and procedure can be established only by expert medical evidence. The exception is where the lack of skill or care is so apparent as to be within the comprehension of laymen and to require only common knowledge; then expert evidence is not required. Such cases not requiring expert medical testimony would be leaving objects in a patient's body or injuries remote to the area of operation as injury to the eye during an orthopedic procedure.

Fourth, in Alabama the legal duty of the doctor in attending a patient is to exercise "that degree of care and skill as physicians in the same neighborhood, pursuing the same general line of practice" ordinarily exercise

in such cases. The "neighborhood" rule has been much criticized and has been abandoned in a number of states. It is still the law in Alabama. The question remains in modern Alabama as to the limits of the neighborhood. *Parish v Spink* (1969) 284 Ala. 263.

Fifth, do not try to become the lawyer in defense of your own case. Your insurer will provide you with excellent, experienced counsel. Do not accept advice of your fellow doctors without checking out the advice with your lawyer. I have read some articles by doctors giving advice to fellow doctors in medical malpractice suits, and I wonder if the advice is taken how the doctor will avoid jail to say nothing of a civil judgment against him.

Sixth, finally most of the complaints against doctors that reach a lawyer could have been avoided if the line of communication between the doctor and the patient had been open and if the patient had believed that the doctor was open and frank. All of us are harassed at times and can not take the time to fully explain our procedures, but taking the time is probably the most important single thing that can be done to minimize the number of complaints.

Until such time as you receive a complaint, be reassured that you belong to the more than eighty per cent of the doctors in the country who in a lifetime of practice have never had a malpractice suit and be further reassured that you are practicing in Alabama where the number of doctors who have never been sued must approach the Ivory soap claim of 99 per cent pure.

1. At least four of the reported cases were actually against dentists, but they have been included in the statistics.

2. In 1969, the architects, engineers, and contractors pushed through the Alabama Legislature a similar bill except that the time limitations are four and seven years. The medical profession is not the only one concerned about its exposure to malpractice suits.

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(Continued from Page 566)

from appropriate educational agencies. The Board of Censors will serve as an arbitration committee, if a decision of the Committee on Medical Education is questioned.

III

General Requirements

(1) The Physician's Recognition Award of the American Medical Association shall be the basic requirement for continued membership in the Association. This provides that each member must complete 150 hours of acceptable continuing education every three years. The three-year continuum used for the Physician's Recognition Award begins July 1 of the initial year.

(2) Alternate plans of acceptable requirements are as follows:

A. Compliance with the continuing education requirements of the American Academy of Family Physicians.

B. Documentation of recertification by any specialty society provided the physician limits his practice to the definition of the specialty.

C. The continuing medical education requirements of specialty societies other than the Academy of Family Physicians should such become established. Such programs would be subject to review by the Medical Education Committee prior to their acceptance.

IV

Implementation

It is recognized that most members of the Association have many of the credits necessary for the Physician's Recognition Award, and that most members could comply as of the present.

Upon approval of the plan, it will become effective July 1 of the year it becomes constitutional, and all members will be required to have fulfilled requirements for the Physician's Recognition Award or an acceptable alternate requirement three years from that date. (Beginning July 1, 1974, all members will be required to have complied by June 30, 1977)

The Medical Education Committee will be responsible for keeping records and supplying the Board of Censors with the names of those members who have not complied within the required period. Each year it will provide a report form to be sent to all members on July 1, so the reporting may be done on an annual basis for the physician's convenience.

This same Medical Education Committee shall list all accredited programs in continuing education as they are scheduled, in the *Journal of the Medical Association of the State of Alabama* or the *Alabama M. D.* and accredited programs within the State of Alabama will be listed in the appropriate issue of the Journal of the American Medical Association.

This review of the development of the resolution and its specifics appears in *The Journal* for your consideration.

(Continued from Page 538)

Methohexital produces no muscle relaxation in safe dosages, and provides little or no analgesia.

In summary, in my opinion, this article contains many misleading inferences and conclusions with the most misleading impression being that the authors personally administered methohexital as the only "anesthetic" agent in 214 cases without the use of muscle relaxants and with only nasal oxygen administered to the patient. If this is the case it is truly a feat not to be admired, copied or published.

Sincerely,

Wilson C. Wilhite, Jr., M. D.
Carraway Methodist Hospital
Birmingham, Alabama

A Possible Dream—The Coosa-Tallapoosa Emergency Medical Council

M. S. Brasfield, M. D.

The idea for the Coosa-Tallapoosa Emergency Medical Council started in July 1971 when the Mayor of Alexander City, William L. Radney, sent two representatives to an Emergency Medical Services workshop in Montgomery. Following this, the Jaycees of Alexander City were approached as possible sponsors of a local council. In September, 1971, an educator for the Department of Public Health gave a presentation to the Jaycees which included the Movie "Before the Emergency". The Jaycees voted that night to sponsor the local council. The Alexander City Emergency Medical Council met for the first time three weeks later, and M. S. Brasfield, M. D., was elected president. The council was made up of representatives of the medical profession, hospital representatives and members of the Fire Department, Police Department, State Troopers, ambulance companies, rescue squads, mill safety directors, the Red Cross and the Jaycees.

Four committees were appointed to evaluate the delivery of emergency care in the community. These were:

1. Personnel training
2. Communications
3. Transportation
4. Hospital emergency facilities

Over the next several months these committees conducted surveys and consulted agencies including the Northeast Regional Health Planning Association, Highway Traffic and Safety and the State Health Department. The surveys showed that the following improvements were needed:

Personnel training: The ambulance attendants at the time either held a red cross first aid or advanced first aid cards. Several companies were operating part-time personnel who had no training. No one in ambulance work had received or taken the 81-hour Dunlap course.

Communications: There was a collection of citizen band radio and two business channels, none of which could communicate with the hospital or with one another.

Transportation: Ambulances were supplied by four funeral homes; there were three combination hearse ambulance coaches with no medical equipment, two standard station wagons with folding cots and minimal equipment, and one Chevrolet suburban ambulance with minimal equipment but no radio. None of the vehicles would meet the standards of the Highway Safety Act of 1966.

Hospital Emergency Facilities: Russell Hospital had a four-bed emergency room and a nurse on duty. At the time there was no regular physician daily call schedule and the Disaster Plan was out-dated in that it did not include a number of new members of the medical staff.

The findings of the survey were presented to the Alexander City, City Council in March, 1972.

The City Council was very receptive to the ideas. They had delayed doing a survey because they did not know the proper way to turn. Studies were begun to seek funds to finance the project. At this same time the nearby town of Goodwater had begun to seek some matching funds for an ambulance service. A grant application was presented to the Highway Traffic and Safety Department. The Northeast Alabama Regional Health Planning Association brought the town of Goodwater and Alexander City together. Representatives from the other local counties and communities were invited to join but none responded.

Classes for Emergency Medical Technicians were started in March 1971 and included a first aid course for firemen. The text book for this course was "Emergency Care and Transportation of the Sick and Injured". The first class at the Alexander

(Continued on Page 580)

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual searring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual searring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

he lesions on his face
e solar/actinic—
-called "senile" keratoses...
nd they may be premalignant.

ar, actinic or senile keratoses

e lesions may be called by several names, but they ly can be identified by the following characteris- The typical lesion is flat or slightly elevated, of a nish or reddish color, papular, dry, rough, adherent harply defined. They commonly occur as multiple ns, chiefly on the exposed portions of the skin.

quence of therapy— ctivity of response

several days of therapy with Efudex® (fluorouracil), ema may begin to appear in the area of the lesions; eaction usually reaches its height of unsightliness iscomfort within two weeks, declining after dis- nuation of therapy. This reaction occurs in affected . Since the response is so predictable, lesions that t respond should be biopsied.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

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Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

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(Continued from Page 577)

City State Junior College consisted of some 50 firemen from Alex City, Opelika and Montgomery. A second class was also offered to firemen in the fall of 1971 and the winter of 1972. The first class for ambulance attendants began in the spring of 1972. These classes were taught by a teaching team of six physicians and two laymen. The basic science part was taught by the biology instructor at the junior college and extrication and rescue by the Alexander City Fire Chief.

The latest course was offered as a two-quarter course in the winter and spring of 1973. The course was expanded to 100 hours and included defensive driving as part of the course. All the students, including the firemen, spent a minimum of 10 hours in the emergency room.

There were a number of set-backs. The first was the installation of 911 by the phone company. The potential was greater than the phone equipment that was in current use in the area in Goodwater. Any regular phone number which contained a 9 (all were on exchange 839) followed by a 11, either together or separated by another number, would cause the phone in the police department to ring. Service had to be discontinued at Goodwater until up-to-date equipment could be installed. There were two 911 dispatches in the area, one at the Alexander City Fire Department and the other at the Dadeville Police Department. Both were plagued by numerous crank calls.

It was found that financing the project would prove difficult. There was matching grant money for only one vehicle from Highway Traffic and Safety. To accept this would jeopardize the entire operation as it would put a government-owned vehicle in competition with private enterprise. Numerous proposals were studied but no results were obtained until late November 1972. There was one bright spot in the fall of 1972. The Goodwater volunteers took delivery of a van-type ambulance and went into operation.

The big event that helped further the cause of emergency care came on November 22, 1972. On that date a funeral home in Camp Hill elected not to comply with the provisions of Act 1590 and went out of the ambulance business. This left the entire eastern half of Tallapoosa County without ambulance services. People had to rely on the already over-taxed services of Alexander City and Auburn ambulance companies.

On December 12, 1972, a called meeting of the Alexander City Emergency Medical Council was held at the courthouse in Dadeville. For the first time representatives of all the local governments in the area were present. The findings of the survey and recommendations were presented to the group. At that time the Emergency Medical Council was enlarged to become the Coosa-Tallapoosa Emergency Medical Services Council. The governmental leaders agreed to fund the project with $1.50 per capita of revenue sharing monies. The two hospitals in the area agreed to purchase radio base stations. The City of Alexander City was designated purchasing agent to take advantage of governmental discounts and to handle the paper work in getting bids. The bids for ambulances and radios were let on January 11, 1973. It was decided to purchase two van ambulances and one medical module. One van was to be placed at Dadeville and one van and one module would be in Alexander City. The radios were to be two frequency hear systems with both 155.340 mHz and 155.280 mHz. At Russell Hospital there was to be a separate paging system for physicians on 151.805 mHz.

There were a number of delays in delivery of the system over the next several months. The ambulances were delivered in August 1973. The vehicles were supplied by Southern Ambulance Company of LaGrange, Georgia. In order to get early delivery the council voted to accept Georgia specifications which actually exceeded those set down in Act 1590.

There was a problem with the installation of radio equipment. Specifications called for four frequency radios with a remote hand set in the patient compartment and digital encoder. The installation of the hospital based

radio also produced some major problems which resulted in changes in the personnel of the installing company. A number of phone calls to officials of the company producing the radios were made by the chairman of the Communication Committee before satisfaction was obtained. It was found there were some twenty-three different units using the same frequency reed assigned to Russell Hospital. Changing the activating frequency was necessary to relieve some of the radio traffic.

During the Summer of 1973, a number of Emergency Medical Technicians joined together to form an educational association. They meet monthly and have a program related to emergency services. The topics to date have included a Medical-Legal Questions and Answer Session by the Area Law Enforcement Agencies; the use of Transport Isolette; and eye injuries. The name chosen for this association was Emergency Medical Technician Association of Coosa-Tallapoosa County (EMTACT). The abbreviation of its name is used as ambulance call letters. EMTACT functions under the Emergency Medical Services Council and has representatives on the council.

Since August 1973, the Emergency Medical Services Council had had many successes. By the end of November 1973 EMTACT squad in Alexander City had answered 110 calls. It had a major problem with collections. Too many in the community felt that since the equipment was operated by the City they did not need to pay. An intensive education program through the newspaper and radio has improved the situation. The community has benefited immeasurably from the better equipment and training. The first home delivery by EMT took place November 1973. The mother, who could not make it to the hospital in time for the delivery, was the Director of Nursing in Russell Hospital. Mother and daughter did well.

Use of Military Aircraft in EMS Systems - M.A.S.T.

The term "M.A.S.T." has been heard for several years now at Emergency Medical Services gatherings. In Alabama numerous manhours of planning and coordination of efforts have been expended by the military, state legislators, congressmen, and local health service providers. All the time and effort is now ready to "pay off". Enabling legislation has been signed by the President which has made M.A.S.T. (Military Assistance to Safety and Traffic) a reality.

The expansion of the pilot M.A.S.T. program from the original 5 test sites will include two (2) sites servicing Alabama; located at Fort Rucker and Fort Benning. The program will make available to the medical community within a 100 mile radius of these sites, helicopters configured as air ambulances with medically trained crews on board. The Benning site is now approved and approval on the Rucker site is anticipated around the first of the year.

The MAST concept supplements the existing emergency medical service system. The aircraft with medical equipment, and supplies will be maintained in a state of readiness to respond efficiently and effectively to serious civilian medical emergencies. Serious medical emergencies are defined as situations where an individual's condition requires that he be air-evacuated to a medical care center as soon as possible to prevent his death or the aggravation of his illness or injury. In addition to responding to serious medical emergencies resulting from highway accidents, MAST units also will provide inter-hospital transfer of critically ill or injured patients or premature infants to intensive care units, transport medical personnel and/or equipment to the scene of an emergency, or transport human organs or blood under special emergency circumstances.[1]

It should be stressed that the air ambulance is an adjunct to the existing resources.

(Continued Next Page)

If a ground ambulance can handle the situation in a medically safe response, the existing service should be utilized. Requesting of an aircraft to transport based only on inability of the patient to pay normal transport costs is unacceptable and will jeopardize the continuation of the program.

Many physicians have already availed themselves of the usage of the military aircraft under the "mercy mission" nomenclature. The advent of the MAST program will be providing these same services but under a more durable and dependable structure. With the completion of the Emergency Medical Services Communication Network, Alabama will have a communications system where hospitals, law enforcement officials, civil defense, and most ambulances will be able to communicate directly with the aircraft during the actual mission. A special four (4) channel portable radio will be placed in the aircraft allowing for this communications capability. Two (2) portable incubators will also be purchased and placed at Benning and Rucker. These pieces of equipment as well as communication equipment for hospitals and ambulances will be purchased from the $400,000 revenue sharing funds given the Alabama Department of Public Health by Governor George C. Wallace.

The transport of premature infants in incubators from remote areas or limited care facilities to the premature infant intensive care centers has produced outstanding results at the Colorado test sites. Through March of 1972, the civilian and military communities worked cooperatively to save the lives of 91 of the 93 infants transported by the MAST unit. This is in contrast with the 46 premature infant survivals that might ordinarily have been anticipated.[2]

The MAST Steering Committee of Alabama has established a patterned procedure for utilization of the MAST aircraft once the EMS Communication Network is established. Determination of need for the aircraft is of paramount importance in insuring proper usage of the program. The Committee membership feels that the request should enter medical channels as soon as possible. Tentative plans call for the initial request being accomplished by a physician, nurse, emergency medical technician, or law enforcement official. The requesting channels are from the emergency site or inbound ambulance to the local hospital. The local hospitals request must have a physician's approval before transmitting information for an aircraft. Fourteen (14) specific items are needed by the military when receiving the MAST mission request.

The majority of missions flown by the test sites have been from hospital to hospital. It is anticipated that Alabama's utilization will be no different from past experiences. What the State MAST Committee is concerned about is the proper utilization of the aircraft and prevention of unnecessary missions simply because of the glamour associated with aeromedical evacuation. The Committee therefore makes the recommendation that all MAST requests be approved by a physician.

The MAST program is now available to Alabama physicians to utilize. The means of obtaining a MAST aircraft is available to the physicians through his local hospital. Because of the lack of communications at the present time the telephone numbers at Benning and Rucker are controlled within medical channels to protect against false calls.

The success of this additional service will depend upon Alabama's physicians. Usage ideas and concepts are available from local EMS Councils, the Alabama Committee on Trauma, the Military Coordinators and the Emergency Medical Services Division, Alabama Department of Public Health, State Office Building, Room 657, Montgomery, Alabama, 36104 - (205) 269-7204.

Reference Sources:

1. Interim Planning Guide, Military Assistance to Safety and Traffic (MAST)

2. Hanlon, John J., M. D., "The Urgency of Emergency Medical Services Systems", First Regional Conference, Emergency Medical Services, Atlanta, Georgia, May 2-3, 1972.

around the state

Vital Statistics

NEW MEMBERS

Calhoun County

Ratanaubol, Krieng Kri, b 35, mc Chulalongkorn Hosp. Med. School, Bangkok, Thailand 61, recip. Virginia 72, Anniston Memorial Hospital, Anniston, Alabama 36201. Path.

Colbert County

Kolli, Indira, b 36, mc Guntur, Guntur, South India 58, recip. Ohio 73, 505 North Columbia, Sheffield, Alabama 35660. Anes.

Kolli, Radhakrishnamurty, b 35, mc Guntur, Guntur, South India 58, recip. Ohio 73, 505 North Columbia Avenue, Sheffield, Alabama 35660. S.

Cullman County

Beeler, Henry Stewart, b 39, mc Kentucky 65, recip. Kentucky 73, 116 2nd St., S. E., Cullman, Alabama 35055. GP.

Dunn, John Rees, b 36, mc Virginia 67, recip. Virginia 70, 404 Arnold St., N. E. Cullman, Alabama 35055. R.

Lee County

Bidstrup, Richard Joseph, b 35, mc Louisiana 62, recip. Louisiana 73, 121 North 20th St., Opelika, Alabama 36801. ALR.

Mock, William Edward, b 42, mc Emory 67, recip. Ga. 70, 121 North 20th St., Medical Arts Center, Opelika, Alabama 36801. Oph.

Macon County

Williams, Robert Xavier, b 35, mc Meharry 62, recip. Ga. 73, John Andrew Memorial Hospital, Tuskegee Institute, Alabama 36088. ObG.

Morgan County

Graham, Charles Pattison, Jr., b 40, mc North Carolina 65, recip. North Carolina 72, P. O. Box 1029, Decatur, Alabama 35601. S.

Talladega County

Pinson, Walter Pierce, III, b 40, mc South Carolina 67, recip. NBME 72, 308 W. Hickory, Sylacauga, Alabama 35150. I.

Smith, James William, b 39, mc Alabama 70, recip. NBME 71, 308 W. Hickory, Sylacauga, Alabama 35150. Pd.

Tuscaloosa County

Hubbard, William Henry, b 33, mc Duke 60, recip. Florida 73, College of Community Health Sciences, Box 6291, University, Alabama 35486.

Sneed, Raphael Corcoran, b 42, mc Alabama 68, sb 69, 410-D 15th St., East, Tuscaloosa, Alabama 35401. Pd.

MEMBERS DECEASED

Baldwin County

Van Wezel, Norman, Magnolia Springs, Alabama, Deceased 10/73

Cullman County

Dodson, Robert Bruce, Cullman, Alabama, Deceased 12/25/73

Tuscaloosa County

Moody, Maxwell, Sr., Tuscaloosa, Alabama, Deceased

(Continued Next Page)

CHANGES OF ADDRESS

Bullock County

Smith, Murray, present Tuskegee to 403 South Elm, Tuskegee, Alabama 36083.

Butler County

Davis, William Evans, present Greenville to P. O. Box 98, Greenville, Alabama 36037.

Calhoun County

Laws, Henry Latham, II, Anniston, Alabama to Univ. of Ala., Dept of Surgery, Birmingham, Alabama 35294.

Clarke County

Tullos, Emmett Albert, Jr., present Jackson to 305 E. Church Street, Jackson, Alabama 36545.

Jefferson County

Boshell, Buris Raye, present Birmingham to 1808-7th Avenue South, Birmingham, Alabama 35294.

Cloud, Robert Emmett, Birmingham to Route 1, Box 1388, Helena, Alabama 35080.

Siniard, Emmett Clarence, present Birmingham to 2794- Montevallo Road, Birmingham, Alabama 35223.

Mobile County

Kinsey, Herbert Peavy, present Prattville to 311 South Memorial Dr., Prattville, Alabama 36067.

Mershon, Ronald Burdette, Mobile to 907 Sea Cliff Drive, Fairhope, Alabama 36532.

Montgomery County

Strong, Quentin Roosevelt, present Montgomery to 112 Coliseum Blvd, Montgomery, Alabama 36109.

Tuscaloosa County

Quenzer, Fred August, present University, Alabama to P. O. Box Y, University, Alabama 35486.

Strahan, Eva Eugenia, Tuscaloosa, Alabama to The Pearl River County Nursing Home, Poplarville, Mississippi 39470.

Thomas, James Henry, present Tuscaloosa to 1128 McFarland Blvd., N. E., Tuscaloosa, Alabama 35401.

Trice, Peter Alba, Jr., present Tuscaloosa to 1128 McFarland Blvd., N. E., Tuscaloosa, Alabama 35401.

Winston County

Manasco, Hobson, present Haleyville to Medical Arts Clinic, Haleyville, Alabama 35565.

Wilson, William Kindred, present Haleyville to Medical-Dental Clinic, Haleyville, Alabama 35565.

Wood, John Edwin, present Haleyville to Medical Arts Clinic, Haleyville, Alabama 35565.

NEW TELEPHONE NUMBERS

Beeler, Henry S., Cullman	739-0455
Bidstrup, Richard J., Lee	749-8249
Campbell, Robert E., Colbert	383-2821
Dunn, John R., Cullman	739-3702
Graham, Charles P., Morgan	355-6414
Hubbard, William H., Tuscaloosa	339-2970
Kolli, Indira, Colbert	383-3357
Kolli, Radhakrishnamurty, Colbert	383-3357
Mock, William, E., Lee	749-1486
Pinson, Walter P., III, Talladega	245-5211
Ratanaubol, Kreing K., Calhoun	238-8727
Smith, James W., Talladega	245-5241
Sneed, Raphael C., Tuscaloosa	758-4476
Stevenson, Edward W., Jefferson	591-6570
Williams, Robert X., Macon	727-8276

MEMBERS TRANSFERRED

Calhoun County

Johnson, Roderick Gray, 601 Ayers Street, Anniston, Alabama 36201. From Tallapoosa County Medical Society. S.

(Continued on Page 585)

The Fate of the Motorcycle Safety Bill In The 1973 Alabama Legislature

William A. Webb, M. D., F. A. C. S.
Auburn-Opelika, Alabama

In August 1972, The Trauma Committee of the Alabama Chapter of the American College of Surgeons felt it necessary to introduce motorcycle safety legislation in the State Legislature due to the rapid rise in morbidity and mortality involving these vehicles. With the help of Representative Bill King of Huntsville, Bill #160 was drafted and included the following important points:

1. Elevating the legal age required to operate a motorcycle from fourteen to sixteen years.

2. Requiring a specific motorcycle examination to be passed. An automobile license would no longer entitle one to operate a motorcycle.

3. Requiring long pants and a shirt to be worn while riding on a motorcycle.

4. Requiring shoes to be worn while riding on a motorcycle.

Representative King did an excellent job of introducing the bill in the House of Representatives and was instrumental in getting it through the Judiciary Committee with only one compromise. The legal age for operating a motorcycle was maintained at fourteen years. The Bill was then introduced onto the floor and subsequently passed the House.

The Bill was treated with less enthusiasm by the Senate as were many vital issues. It was introduced in that Chamber by Senator Bill McLain of Huntsville; and despite encouraging words from the Governor, the Lieutenant Governor and the chairman of the Transportation and Commerce Committee where the Bill was assigned, the Bill died in Committee. "Heavy pressure from the motorcycle industry" was the reason cited by several committee members for the failure of the Bill to pass.

Many people worked long hours to get this Bill passed. The special efforts of Representative King, the State Parents-Teachers Association, the Huntsville Jaycees, and the Madison County Women's Medical Auxiliary should be noted.

There is a definite need for this legislation since national motorcycle registrations have surpassed 3.3 million. 250,000 motorcycle accidents and 2500 deaths are occuring annually. Mortality based on number of miles driven make the motorcycle the most hazardous type of motor vehicle. Renewed efforts will be made in the next legislative session to insure the passage of this legislation.

(Continued from Page 584)

Lienke, Roger Irving, Medical Arts Building, Anniston, Alabama 36201. GP. From Madison County Medical Society.

Pike County

Eakes, Timothy Dale, 106 Kaye Circle, Troy, Alabama 36081. From Covington County Medical Society.

Tuscaloosa County

Packard, John Mallory, 81 Arcadia Drive, Tuscaloosa, Alabama 35401. C. From Jefferson County Medical Society.

Woddail, Joseph Doyle, 74 Woodland Hills, Tuscaloosa, Alabama 35401. P. From Marion County Medical Society.

MEMBERS REMOVED

Colbert County

Weber, Alvin Julian, III, Sheffield, Alabama Removed.

Lawrence County

McCorkle, Raymond Edward, Courtland, Alabama, Removed.

Tuscaloosa County

Thomas, George Emanuel, Tuscaloosa, Alabama, Removed.

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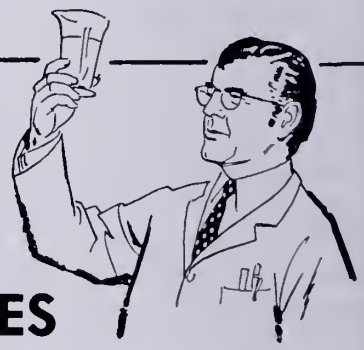

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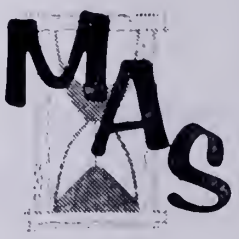

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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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THE JOURNAL

of the

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THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA · 1873 ·

President's Page

DR. CAMP

Ya'll Come

This will be my last opportunity to greet you through the President's Page. I wish to thank all of you who have helped me during my year as President. I greatly appreciate the honor conferred on me in April of '73 when you elected me your President. This has been a rather hectic year, because there have been many changes in the "house of medicine." I hope that we can bend a little and accept these changes in order to stave off as long as possible the complete socialization of medicine. I strongly believe in the private practice of medicine and I believe most Alabama physicians share this view.

I wish to take this opportunity to invite each and every one of you to come to Huntsville during the April meeting. We have changed the schedule from its usual format. We are going to have a brief convocation of the assembly on early Thursday morning and try to end this around 9:30. At this time, buses will await us and proceed to NASA headquarters where we will be briefed and have a tour of the NASA Space Center here in Huntsville. I have always found this an extremely interesting trip and have never failed to profit by availing myself of the opportunity to take this trip. Thursday afternoon, the Orientation Program will be given. At the same time, those who have suggestions which they wish to present to the reference committees, may do so since the reference committees will be in session to hear your suggestions. I hope that the membership will have some good suggestions to present to these committees. It is only by good suggestions that the Association can improve its manner of transacting business. Following these meetings there will be several alumni meetings and following these alumni meetings, the Medical Association of Madison County will be the host for a party for all members. We hope we'll have a good turnout for this program. Friday will be the Scientific Session. We have some very excellent speakers on our program. We are particularly honored to have the first physician astronaut, Dr. John Kerwin, who is going to address us about his experiences in space. We also have several other fine speakers, and I hope that all our scientific speakers will have good attendance. It is always most embarassing to have a visiting speaker with 15 or 20 people in the audience. I hope this won't happen in Huntsville. Saturday morning will be devoted to the business of the Association. In behalf of Mayor Davis of the City of Huntsville, I wish to take this opportunity to urge all of you to attend and assure you that the City of Huntsville will do all in its power to see that you have a pleasant and profitable visit.

E. E. Camp, M. D.
President

Student Trend To Family Practice Confirmed By Survey

A survey of 1974 graduating medical students by the American Academy of Family Physicians shows that (1) more medical students than ever before are choosing family practice as their specialty, and (2) that the demand for first-year spaces in family practice residencies exceeds the number of spaces available by almost two to one.

The purpose of the study, conducted by the Academy's Education Division, was to determine what deficit—if any—existed in first-year spaces before the National Intern and Resident Matching Program (NIRMP) results are released.

One hundred and sixty of the 191 approved residencies have responded so far. As of February 4, these training units reported 2,014 graduates seeking first-year spaces. Estimated spaces available stand at about 1,170 leaving a deficit of 844 graduates desiring first-year spaces.

Dr. Robert Graham, assistant director of the AAFP Education Division, said residency directors have indicated to him that if enough financial and faculty support could be obtained, extra spaces might be created to absorb at least some of this deficit.

Dr. Graham also estimated that approved family practice residency training programs will probably reach the 230 mark by January 1, 1975. This, he says, coupled with program expansion, hopefully will create enough second-year spaces to allow some of the unsuccessful 1974 applicants to transfer from interim training of another type to family practice residency training in 1975.

Dr. Graham anticipated that family practice programs will graduate more than 350 family physicians this year. This increase, and future estimates, indicate healthy progress toward the Academy's announced goal of having at least 25 per cent of the nation's medical school graduates enter family practice.

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.
Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.
Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).
Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.
There is no experience in pregnant women who have received this drug.
Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.
Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.
Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.
CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)
Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.
How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.
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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

They Need You Now

Mental Retardation is a condition of impaired mental development. It originates before or during birth or in early childhood and retards intellectual growth, social adjustment. It constitutes a lifelong handicap and claims more victims than permanent polio, deafness, blindness, multiple sclerosis, cerebral palsy, rheumatic heart disease and epilepsy combined. Retarded children cannot speak for themselves, cannot ask for special training and help required, cannot campaign for needed community facilities and for legislation. Our Alabama Association for Retarded Children must speak for these children. The AARC is a non-profit organization dedicated to improve the general well being of all retarded children and adults.

Mental Retardation can strike any family, in any neighborhood, in any community, at any time. Four out of every one hundred people are mentally retarded. It is everybody's problem and it is growing.

If these children are to be helped, local schools and communities of the State must greatly extend their services and programs to all exceptional children. Alabama can provide for its exceptional children and youth - the funds are available. The Alabama Legislature has mandated, (Act No. 106), that we will provide for all exceptional children by 1976. Are you willing to help win the battle? You are urged to personally contact your local representatives and senators of the Alabama legislature - tell him, or her, that you want and need Phase II funding of Act 106.

With your help a number of the mentally retarded can become useful citizens, ready to work and support themselves and lead useful lives.

MRS. GRADY

Men and women are needed to promote community action and to organize volunteer groups. Young people are needed to seek careers in fields of special education for the retarded. Alabama's exceptional children need your help now to show that "We Care".

I would like to take this opportunity to thank all of my state officers, board members, Mr. Pat Patterson and his staff for the wonderful help and cooperation they have given me during my year as President. Our year has been very rewarding, very successful, and much has been accomplished.

Betty Grady

Betty Grady, President

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Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. **Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, descreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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The Weight of Professional Opinion

It's time for action to defend the laws and regulations that protect your patients against drug substitution.

These professional and trade organizations are united in supporting antisubstitution statutes and regulations:

The American Academy of Dermatolog

The Board of Directors of the American Academy of Family Physicians

The Executive Board of the American Academy of Neurology

The Committee on Drugs of the American Academy of Pediatrics

The American College of Allergists

The Executive Committee of the American College of Obstetricians and Gynecologists

The Board of Regents of the American College of Physicians

The Board of Trustees of the American Dental Association

The Board of Trustees of the American Medical Association

The American Psychiatric Associatic

The Executive Committee of the National Association of Retail Druggists

The Board of Directors of the Pharmaceutical Manufacturers Association

The National Wholesale Druggists' Association

Joint Statement on Antisubstitution Laws and Regulations

The purpose of this statement is to affirm the support of the participating organizations for the laws, regulations and professional traditions which prohibit the unauthorized substitution of drug products.

Traditionally, physicians, dentists and pharmacists have worked cooperatively to serve the best interests of patients. Productive cooperation has been achieved through mutual respect as well as a common concern for the ideals of public service. This mutual respect has been reflected, in part, by joint support over the years for the adoption and enforcement of laws and regulations specifically prohibiting unauthorized substitution and encouraging joint discussion and selection of the source of supply of drug products. The basic principles of medical, dental and pharmacy practice are thus utilized and preserved in the interest of patient welfare.

The antisubstitution laws have not obstructed enhancement of the professional status of pharmacy any more than they have in and of themselves guaranteed absolute protection from unsafe drugs, or freed physicians, dentists and pharmacists from their responsibilities to patients. As a practical matter, however, such laws and regulations encourage interprofessional communications regarding drug product selection and assure each profession the opportunity to exercise fully its expertise in drug usage, to the advantage of patients.

Physicians and dentists should be urged to increase the frequency and regularity of their contacts with pharmacists in selection of quality drug products, recognizing that economies to patients can be improved through such communication, taking into account the patients' needs. The pharmacist's knowledge of the chemical characteristics of drugs, their mode of action, toxic properties and other characteristics that assist in making drug selection decisions should be utilized to the fullest extent practicable by physicians and dentists in serving their patients.

Since drug product selection entails knowledge derived from clinical experience, the physician's and dentist's roles in product selection remain primary and do not permit delegation of decisions requiring medical and dental judgments. A broader role in therapy will evolve for pharmacists as improved understanding and cooperation among the professions continue to grow.

There has been no evidence that there are convincing reasons to modify or repeal existing laws and regulations prohibiting the unauthorized substitution of another drug product for the one specified by a prescriber. It is our belief that such laws and regulations merit the joint support of the medical, dental and pharmaceutical professions and the pharmaceutical industry.

Add your opinion to the weight of other professionals and send it to your state assemblyman or legislator.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D. C. 20005

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Placidyl®
ETHCHLORVYNOL)

Brief Summary

Indications—Placidyl (ethchlorvynol) is indicated as short-term hypnotic therapy in the management of insomnia.

Contraindications—Drug hypersensitivity and porphyria.

Warnings—Not recommended during the first and second trimester of pregnancy. Caution patients of possible combined exaggerated effects with alcohol, barbiturates, tranquilizers or other CNS depressants. Exaggerated effects might result in blurring of vision, paralysis of accommodation and profound hypnosis. Caution patients concerning driving a motor vehicle, operating machinery, or other hazardous operations requiring alertness after taking the drug. Administer with caution to patients with suicidal tendencies and do not prescribe large quantities of the drug. Adjustment of the dosage of oral anticoagulants might be necessary when beginning ethchlorvynol therapy, during therapy, or after stopping therapy. This drug is not recommended for use in children. PLACIDYL HAS THE POTENTIAL FOR THE DEVELOPMENT OF PSYCHOLOGICAL AND PHYSICAL DEPENDENCE. INSTANCES OF SEVERE WITHDRAWAL SYMPTOMS, INCLUDING CONVULSIONS AND DELIRIUM CLINICALLY SIMILAR TO THOSE SEEN WITH BARBITURATES, HAVE BEEN REPORTED IN PATIENTS TAKING REGULAR DOSES AS LOW AS 1000 MG. PER DAY OVER A PERIOD OF TIME WHEN THE DRUG WAS SUDDENLY DISCONTINUED. PROLONGED ADMINISTRATION OF THE DRUG IS NOT RECOMMENDED. Addiction-prone patients or those who are likely to increase dosages of the drug on their own initiative should be observed for evidence of signs or symptoms which may indicate possible early withdrawal or abstinence symptoms. Signs and symptoms associated with withdrawal and abstinence include unusual anxiety, tremor, ataxia, slurring of speech, memory loss, perceptual distortions, irritability, agitation and delirium. Other less well defined signs and symptoms, not necessarily due to withdrawal and abstinence, may include anorexia, nausea or vomiting, weakness, dizziness, sweating, muscle twitching and weight loss. Abrupt discontinuance of Placidyl following prolonged overdosage may result in convulsions and delirium.

Precautions—Toxic amblyopia has been reported with long-term continuous use of ethchlorvynol. Permanent visual defects have been observed, although amblyopia has improved after discontinuation of the drug. Drug dosage should be limited for elderly and debilitated patients to the smallest effective amount. If pain is present, this drug should only be given if insomnia persists after pain is controlled with analgesics. Caution is advised in prescribing the drug for patients who are being treated with either MAO inhibitors or antidepressants. Transient delirium has been reported with the combination of Placidyl and amitryptyline. Drug dosage should be reduced if prescribed for patients receiving MAO inhibitors or antidepressants. Caution should be exercised in patients with impaired hepatic or renal function. Patients who respond unpredictably to barbiturates or alcohol, or who exhibit excitement and release of inhibition in association with such agents, may also react in this way to Placidyl. Rarely, patients may exhibit symptoms suggestive of an unusual susceptibility to the drug; such as prolonged hypnosis, profound muscular weakness, excitement, hysteria, or syncope without marked hypotension. Transient giddiness or ataxia may occur.

Adverse Reactions—Hypotension, nausea or vomiting, gastric upset, aftertaste, blurring of vision, dizziness, facial numbness, and allergic reaction typified by urticaria have been reported following Placidyl administration. Mild "hangover" and symptoms of mild excitation have occurred in some patients. There have been rare reports of cholestatic jaundice occurring in patients taking ethchlorvynol. A few cases of thrombocytopenia have been reported in patients receiving ethchlorvynol. 302430R

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(ETHCHLORVYNOL CAPSULES, 500 or 750 mg.)

CIV

Editorial COMMENT

It is a duty, Not a Pleasure

Within a week after this issue of the *Journal* is dispatched the 113th Annual Session of the Medical Association of the State of Alabama will assemble in the City of Huntsville. President E. E. Camp, M. D., and President-Elect J. Garber Galbraith, M. D., jointly have devised one of the most informative programs ever presented by this Association.

While voting responsibilities on the many issues at stake reside in the elected Counsellors (representing Congressional Districts) and the elected or appointed Delegates (representing the county societies) there are urgent reasons why every member who can possibly arrange to do so should attend this meeting.

Many departures from format have been decreed for the 1974 Session in order that a maximum amount of time may be devoted to the secular problems of physicians which threaten to have a permanent effect on medical practice. Top-ranking experts will be brought in at considerable trouble and expense to "lay the cards on the table" for the enlightenment of our membership.

Within the past year we have seen the complexion of the State Committee of Public Health altered by legislative action to introduce to the council tables new and untried correspondents from paramedical disposition and the general public. It is too early to say what effect this legislation will have on public health administration and operations, but two facts are indisputable: 1. The medical doctor is no longer the sole and controlling voice in the field of public health; and 2. There are very few who believe that this is the finality of the alteration. The success of a few pressure groups to inject themselves into an area in which they are only partially experienced surely will encourage others even less competent to press for participation in future years.

Surely the collective intelligence of every member will be needed in the days ahead to resolve this Association's future course of action.

Two other problem areas which must be confronted are this Association's participation in the Professional Standards Review Organization mechanism and pending federal legislation for national health insurance. Charting a course for a workable program for continuing education for physicians and a total revision of the Constitution and By-laws are subjects no less important. These and many others are matters which will plague physicians for all time to come unless they can be controlled now and directed into an acceptable channel.

The leadership of this Association has taken great pain to hear the voices of the rank and file membership in addition to those who are Counsellors and Delegates. On Thursday afternoon, April 18th, starting at 2 P. M., carefully selected Reference Committees will sit to hear the opinions of every member. From these opinions the Reference Committees will strive to reach a satisfactory conclusion which will be presented to the College of Counsellors and House of Delegates on Saturday morning, April 20, 1974.

The conclusions of the Reference Committees will be only a recommendation to the College and House. At this moment the elected leadership of medicine in this State will be called upon to make the final decisions.

Never before in the history of this Association have the voices from the grassroots been so important. Older physicians who have a substantial investment in the medical practice as well as newcomers to the ranks have tremendous stakes in what will happen at Huntsville this year. For good or evil they will live with the results.

The big question is: Will they make the monetary sacrifices necessary to shape the long, long future of medicine?

Well Done, Good Servant

One of those who will pass from the scene of leadership and responsibility at the 1974 Annual Session of MASA is M. Vaun (don't spell it Vaughn) Adams, M. D., of Mobile. His statutory retirement from the Board of Censors after 15 years of distinguished service culminates a career in organized Medicine extending over a quarter of a century.

He has held the highest honors in his county and specialty societies and served as President of this Association (1963-64) before his elevation to the Board of Censors. He was a delegate to the American Medical Association for 13 years, during which time he served as an architect of AMPAC, national Medicine's political action arm.

Dr. Adams strong-armed this Association into the political arena and the results of his labors have borne much fruit in State and Federal legislative bodies.

As the lone voice for 14 years of "the Free State of Mobile", where the members have blazed many paths for both angels and devils, Dr. Adams' position was often frustrating and sometimes irritating. But the record will show that he served his region well and when all of the benefits from his service are tabulated the assets will be heavily balanced in his favor.

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4. Sugar-free tablet.

An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.

Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg. **Action and Use:** This preparation utilizes the effective expectorant action of glyceryl guaiacolate which significantly stimulates the secretion of respiratory tract fluid. The increased flow of less viscid fluid favors expectoration and has a demulcent effect on the tracheobronchial mucosa. The primary usefulness of Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore useful in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, influenza and the measles. The expectorant action of Hytuss may also provide symptomatic relief in some chronic respiratory disorders when the patient experiences spasms of dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** *Adults*—1 tablet four times daily. *Children*—6 to 12 years of age; ½ tablet 3 or 4 times daily. HOW SUPPLIED: White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. **Literature Available:** On request.

Available through all drug wholesalers.

Hyrex

HYREX COMPANY

832 South Cooper
Memphis, Tenn. 38104

MEDICO - LEGAL DIALOG

The New Mexico Medical-Legal Malpractice Panel Plan

Irwin S. Moise, Chief Justice New Mexico Supreme Court, Retired,
Chairman, New Mexico Bar Association
Medical-Legal Malpractice Panel Committee

"The fundamental purposes of this Plan are twofold: On the one hand, to prevent where possible the filing in Court of actions against physicians and their employees for professional malpractice in situations where the facts do not permit at least a reasonable inference thereof; and, on the other hand, to make possible the fair and equitable disposition of such claims against physicians as are, or reasonably may be, well founded.

"Both professional groups recognize that the mere filing of a malpractice action in Court, however unjustified medically it may be, causes substantial harm to the reputation and practice of the physician concerned. Both groups recognize, at the same time, that persons having legitimate and meritorious grievances against physicians have heretofore often encountered the greatest difficulty in substantiating the claims with expert testimony in Court."

The quotation above is taken from the statement of purposes as contained in the Joint Medical-Legal Plan for Screening Medical Negligence Cases adopted in 1963 by the State Bar of New Mexico and the New Mexico Medical Society.

As stated therein, it had its origin in the feeling by lawyers that the so-called "conspiracy of silence" whereby expert medical proof of negligence of a doctor was difficult or impossible to procure while at the same time doctors were concerned with cases being filed with consequent damages to the reputation of the doctor where no reasonable basis for a claim of negligence was present.

Both the State Bar Association and the State Medical Society were convinced that both feelings had merit, and that an attempt should be made to find a method to deal with the causes. A committee was appointed by each group, and out of the joint meetings grew the plan which was adopted. A number of plans were in effect in localities around the country, and these were considered before the one finally agreed upon was adopted.

As is always true when changes are made in procedures, acceptance of the plan by individual lawyers was slow, and at the outset very few cases were brought before the Panel. However, with the passage of time, and an opportunity to observe its workings, recourse to the Panel, and adherence to its decisions has become a regular practice in cases involving claims of medical negligence or malpractice. It is still true that a small minority of lawyers are not convinced of the merits of the Panel and prefer to file suit without seeking the Panel review, or when dissatisfied with the Panel decision nevertheless take the case to court. However, this is to be expected, and does not alter the inescapable conclusion that the Plan has contributed much to meet the complaints of both doctors and lawyers noted above.

At this point it would be well to take note of certain problems encountered in the Plan as adopted. These problems led to amendments being agreed upon and adopted in 1971.

One of the most often noted complaints was that with a Panel made up of three

(Continued on Page 607)

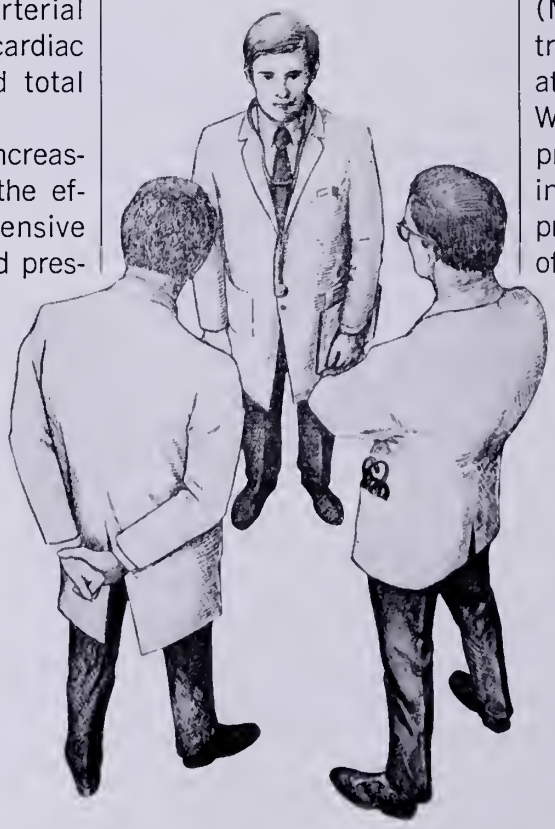
The more physicians consider the hemodynamics of lowering blood pressure...

Most physicians now agree on the importance of reducing blood pressure in the hypertensive patient. But high blood pressure exists, of course, only as part of a complete clinical picture. The hemodynamic profile of well-established essential hypertension is characterized by elevated arterial blood pressure, normal cardiac output, and increased total peripheral resistance.

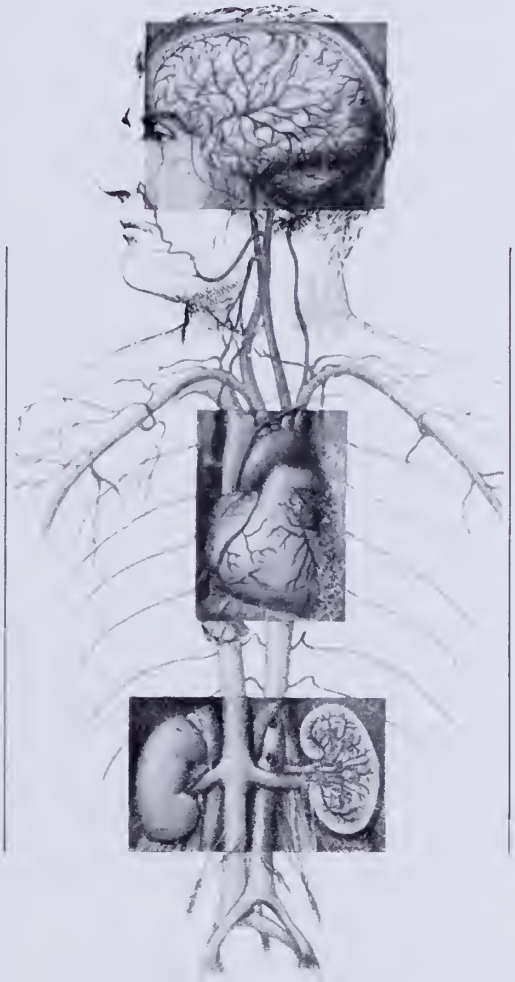
And so, physicians are increasingly concerned with the effects of an antihypertensive agent not only on blood pressure itself but also on the hemodynamic pattern—in short, with the total effect of the drug. *Does* it indeed help lower blood pressure effectively? *Is* peripheral resistance reduced? *Are* cardiac output and renal functions maintained? And, also, is there likely to be drug-induced postural hypotension serious enough to pose a threat to the patient's cerebrovascular status?

With this emphasis on overall drug performance has come a growing reliance on ALDOMET® (Methyldopa, MSD) in the treatment of sustained moderate hypertension.

With its unique hemodynamic profile, ALDOMET has drawn increasing attention and approval from physicians. First, of course, for its efficacy in



the more physicians rely on this unique antihypertensive



owering blood pressure. But here are other considerations s well. Cardiac output is usu- lly maintained with no cardiac cceleration; in some patients he heart rate is actually owed. Peripheral resistance s apparently reduced. LDOMET does not usually ompromise existing renal unction; it generally does not educe renal blood flow, glo- erular filtration rate, or fil- ation fraction. And ALDOMET sually does not cause sympto- atic postural or exercise ypotension.

Some patients on continuous methyldopa therapy may develop a positive direct Coombs test. For more details, see the brief summary of prescribing information.

Contraindicated in active hepatic disease and known sensitivity to the drug. Not recommended in pheochromocytoma or pregnancy. It should be used with caution in patients with a history of liver disease or dysfunction. Discontinue the drug if fever, abnormal liver function, jaundice, or acquired hemolytic anemia occurs.

In most cases of sustained moderate hypertension

TABLETS, 250 mg

ALDOMET®

(METHYLDOPA | MSD)

smoothly lowers blood pressure

For a brief summary of prescribing information, please see following page.

In most cases of sustained moderate hypertension

TABLETS, 250 mg

ALDOMET®
(METHYLDOPA MSD)

smoothly lowers blood pressure

Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis; known sensitivity. Not recommended in pheochromocytoma. Unsuitable in mild or labile hypertension responsive to mild sedation or thiazide therapy. Use cautiously in patients with history of previous liver disease or dysfunction.

Warnings: Acquired hemolytic anemia has occurred rarely in association with therapy with methyldopa. Should clinical symptoms indicate the possibility of anemia, hemoglobin and/or hematocrit determinations should be performed. If anemia is present, appropriate laboratory studies should be done to determine if hemolysis is present. Evidence of hemolytic anemia is an indication for discontinuation of the drug. Discontinuation of methyldopa alone or the initiation of adrenocortical steroids usually results in a prompt remission of the anemia. Rarely, however, fatalities have occurred.

Some patients on continued therapy with methyldopa develop a positive direct Coombs test; incidence reported has averaged between 10% and 20%. It rarely occurs in first six months of therapy, and if not seen within twelve months, is unlikely to develop with continued administration. Positive Coombs test is dose-related; lowest incidence occurs in patients on 1 g methyldopa or less per day. Reversal of the positive Coombs test occurs within weeks to months after discontinuation of methyldopa. Prior knowledge of a positive Coombs reaction aids in evaluation of cross match for transfusions. Patients with positive Coombs tests at time of cross match may exhibit incompatible minor cross match. When this occurs, an indirect Coombs test should be performed. If negative, transfusion with blood otherwise compatible in the major cross match may be carried out. If positive, advisability of transfusion with blood compatible in major cross match should be determined by hematologist or expert in transfusion problems.

Fever has occurred within first three weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first two to three months of therapy. Rare cases of fatal hepatic necrosis have been reported. Liver biopsy in several patients with liver dysfunction has shown microscopic focal necrosis compatible with drug hypersensitivity. Rarely, reversible reduction in leukocyte count with primary effect on granulocytes has been seen; reversible agranulocytosis has been reported. Methyldopa may interfere with measurement of creatinine by alkaline picrate method and of uric acid by phosphotungstate method. When used with other antihypertensive drugs, potentiation of antihypertensive action may occur.

Usage in Pregnancy and Childbearing Age—Not recommended in pregnancy. In women of childbearing age, weigh potential benefits against possible fetal hazards.

Precautions: Perform periodic hepatic function tests and white cell and differential blood counts during first six to twelve weeks of therapy or in unexplained fever. Discontinue if fever, abnormalities in liver function tests, or jaundice appears. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, spuriously high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. Discontinue drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Anesthetics requirements may be reduced; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension may occur after dialysis because methyldopa is removed by this procedure.

Dosage should be limited initially to 500 mg daily when following previous antihypertensive agents other than thiazides. Do not exceed recommended daily dose of 3.0 g. Patients with impaired renal function may respond to smaller doses than patients with normal kidney function. Syncope in older patients has been related to increased sensitivity in those with advanced arteriosclerotic vascular disease; this may be avoided by lower doses. Tolerance occasionally seen either early or late, but more likely between second and third month after initiation of therapy; increased dosage or combined therapy with a thiazide frequently restores effective control.

Adverse Reactions: Sedation, usually transient, may be seen during initial therapy or when dosage is increased. Headache, asthenia, or weakness may be noted as early, transient symptoms. Symptoms associated with effective lowering of blood pressure, including dizziness, lightheadedness, and symptoms of cerebrovascular insufficiency, are seen occasionally. Angina pectoris may be aggravated. Symptoms of orthostatic and exercise hypotension may occur; if symptoms occur, reduce dosage. Bradycardia, nasal stuffiness, mild dryness of mouth, and gastrointestinal symptoms including distension, constipation, flatus, and diarrhea occur occasionally; these can be relieved by reducing dosage. Nausea and vomiting have been reported in only a few patients. Sore tongue or "black tongue," pancreatitis, and inflammation of salivary glands may occur.

Weight gain and edema occur infrequently; if edema progresses or signs of pulmonary congestion appear, discontinue drug. Rarely, urine exposed to air may darken due to breakdown of methyldopa or its metabolites. Other rare reactions include breast enlargement, lactation, impotence, decreased libido, skin rash, mild arthralgia, myalgia, paresthesias, parkinsonism, psychic disturbances including nightmares, reversible mild psychoses or depression, reversible thrombocytopenia, drug-related fever and abnormal liver function studies with jaundice and hepatocellular damage (see **Warnings** and **Precautions**), rise in BUN, and a single case of bilateral Bell's palsy.

Supplied: Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

ADDENDU

MS
MER
SHA
DOH

Let's make blood pressure "required reading" for all physicians.

With recent estimates that abo 23 million Americans have hig blood pressure—and that half o them are not even aware of it—detection of the problem in asymptomatic persons has become an issue of national importance.

Family physicians are being urged to take blood pressure readings as a matter of office routine, regardless of the presenting complaint or the reaso for the visit. And because man people do not see a family physician for relatively long periods of time, some experts are suggesting that ophthalmo gists, gynecologists, dermatologists, orthopedists, psychiatrists, dentists, school nurses, family planning counselors, and other health-care personnel make blood pressur reading a routine part of every examination or consultation.

Of course, a diagnosis of hyper tension cannot be made on the basis of a single reading, but routine blood pressure reading can uncover potential trouble i a certain proportion of patients And when trouble is suggested further evaluation can be pursued more effectively.

Blood pressure "required readin for all physicia

(Continued from Page 603)

doctors and three lawyers, a tie vote was possible, which had the effect of a ruling favorable to the doctor. Notwithstanding the possibility, from 1963 to 1971 in only one case did a tie vote actually occur. As a matter of fact, in most cases the vote has been unanimous. The Plan was amended in 1971 to provide for a presiding chairman, who is a lawyer acceptable to the Medical Society. Subsequent to the amendment, there was one case where the three doctors voted for "negligence" and the three lawyers voted "no negligence," and the chairman joined with the lawyers to make a majority for "no negligence."

A second complaint often voiced by lawyers who come before the Panel was to the effect that whereas the Plan spoke in terms of "substantial evidence," the Panels were sometimes inclined to apply a rule of "preponderance" or "clear and convincing." An attempt to meet this problem—and it is a problem, was made in 1971 by placing a definition of "substantial evidence" in the Plan. The definition adopted reads as follows:

> "By 'substantial evidence' is meant evidence upon which reasonable men can agree that a fact is established, or upon which they may fairly differ concerning the establishment of the fact. It means more than merely any evidence and more than a scintilla, and contemplates such relevant legal evidence as a reasonable person might accept as sufficient to support a conclusion."

Two additional problems which have not been resolved are those which arise out of the "locality rule" and out of issues of "informed consent." Hopefully, some method of attacking the problems will be agreed upon in the future.

As an aid to understanding the Plan, it is briefly summarized as follows: It provides that the Medical Society and Bar Association shall each provide a Committee of not more than 25, plus a Panel Chairman, mentioned above.

The rules provide that the Panel will consider "all cases involving any alleged act of professional malpractice occurring in New Mexico by a physician, his servants, agents or employees." Since 1971 "malpractice" has been defined. The definition reads:

> " 'Malpractice' as used herein is defined as a departure either by action, neglect or inattention from the recognized standards of medical practice in the locality or community, or a failure to do something required by those standards, which proximately results in injury to the patient. Likewise, absent an emergency situation making it unreasonable to do so, there is included within the term, the failure to make a reasonable disclosure of all significant facts, i. e., the nature of the infirmity (so far as reasonably possible), the nature of the operation or treatment, and the more probable consequences and difficulties inherent therein."

A case is commenced by a lawyer filing with the Executive Director of the Medical Society of a claim setting forth briefly, in writing, the facts upon which the claim for damages is based. In the complaint it must be agreed that the Panel will have access to all medical and hospital records and any privilege must be waived. It must also be agreed that the Panel deliberations and discussions will be confidential and that the Panel members will not be called as witnesses. Complainant must also state whether or not court action has been commenced and that the Plan is subscribed to and understood. A fee of $25 to cover expenses of administration of the Plan must be paid when the claim is filed. It has been suggested that the fee should be raised

When the claim is received by the Executive Director of the Medical Society it is promptly forwarded to the Chairman of the Medical Panel and to the Chairman of the Legal Panel. They examine the complaint and advise whether they believe it is a claim cognizable under the Plan and promptly advise the Director. Assuming that it is a proper claim, and it is the exceptional one

that is not so considered, a date is fixed for a hearing and the Executive Director sends out a card to each member of the Medical and Legal Panel inquiring as to his availability to sit as a Panel member in the particular case on a given date, which shall not be later than 60 days from the date of receipt of the application. When the cards are returned, they are tabulated by the Executive Director, who then sends a list of the lawyers who have indicated their availability to the lawyer Chairman and a similar list of the doctors is forwarded to the Chairman of the Medical Panel. Each then designates three of those who are available, plus an alternate, and on the date set a panel of six, being three from each group, meet and hear the case. It is presided over by the Legal Chairman or an Alternate Legal Chairman, who votes only in case of a tie. Also, a consultant specialist may be utilized where special training seems to be important for an understanding.

The hearings are extremely informal with the lawyer for the claimant presenting claimant's position either through witnesses or written statements, or merely by statements to the Panel. In turn, the lawyer for the respondent doctor does likewise. The opposing party is not permitted to be in the room while testimony is being given by the other side, and neither are cross-examination or oral arguments permitted. Counsel are allowed to prove authorities, both legal and medical, but not to argue concerning them. After both sides have presented their evidence, the parties, the consultant and the lawyers are excused and the Panel deliberates much as a jury does, following which a secret vote is taken on the question of "(1) whether there is substantial evidence that the acts complained of occurred and that they constitute professional malpractice and (2) whether there is a reasonable medical probability that the claimant was injured thereby." The Panel is admonished not to attempt to resolve disputed questions of fact or express any opinion on the monetary value of the claim, and neither does it attempt to arbitrate or intervene to compromise or settle the claim. When a decision has been reached the parties are advised by letter signed by the Chairman and the Panel has then completed its duties.

Of course, the decision of the Panel does not end the matter. Even after the decision is reached negotiations between the claimant and the doctor or the insurer will probably continue, although it has been the experience in New Mexico, that when the Panel finds negligence to be absent, a considerable number of cases are dropped. On the other hand, negotiations may continue, but if the Panel has found "no" negligence the settlement value of the case is probably reduced. However, if substantial evidence of negligence has been found to be present the settlement value has probably gone up, and if agreement cannot be reached as to what amount will compensate the claimant for damages suffered, suit will probably be filed. This is as it should be, because certainly there are cases where a person is injured because of a doctor's negligence, and under our system of jurisprudence is accordingly entitled to have a jury determine the issues, including the amount of damages.

A review of experience in cases heard by the Panel discloses that in 91 cases considered negligence was found in 26, no negligence in 56 and the other 9 cases were dropped for one reason or another before being heard by the Panel. Suit was filed in 25 of the 26 cases where substantial evidence of negligence was found to be present. Of these, 19 were settled before trial, 4 resulted in verdicts for the doctor, and 2 are still pending. On the other hand, of the 56 cases where the doctor prevailed before the Panel, 40 were dropped without further action being undertaken, 16 suits were filed, 10 of which were settled before trial, 2 resulted in verdicts for the doctor, and 1 for the plaintiff, 1 was dismissed and 2 are pending.

These figures would seem to give ample support to a conclusion that the Panel has operated effectively and objectively. Concerning its effectiveness, it is only necessary to note that 41 of 91 cases, or 44 per cent of all cases reviewed, did not get to court,

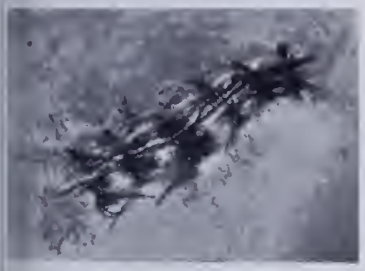
(Continued on Page 613)

Healing nicely, but it still HURTS

HERE Burns

When parenteral analgesia is no longer required, Empirin Compound with Codeine usually provides the relief needed.

HERE Sutures



Empirin Compound with Codeine is effective for visceral as well as soft tissue pain—provides an antitussive bonus in addition to its prompt, predictable analgesia.

prescribing convenience: up to 5 refills in 6 months, at your discretion (unless restricted by state law); by telephone order in many states.

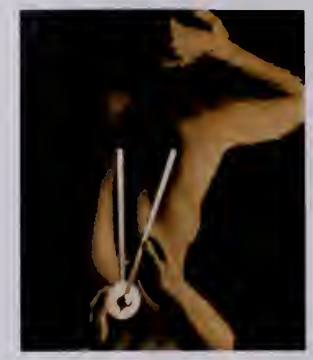
Empirin Compound with Codeine **No. 3,** codeine phosphate* 32.4 mg. (gr. ½); **No. 4,** codeine phosphate* 64.8 mg. (gr. 1). *Warning—may be habit-forming. Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

EMPIRIN® COMPOUND c̄ CODEINE

#3, codeine phosphate* (32.4 mg.) gr. ½
#4, codeine phosphate* (64.8 mg.) gr. 1



For relief of low back pain*
(including intervertebral disc)

Bed rest, moist heat, exercise and 'Soma 350' (carisoprodol) can help relax muscle spasm, relieve mild-to-moderate pain, restore range of motion.*

Economically...with only one tablet *q.i.d.*

Measure the results yourself. (Wallace will even send you a complimentary goniometer.)

* **Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indication as follows:

"Possibly" effective: for symptomatic relief in conditions characterized by skeletal muscle spasm and mild to moderate pain.

Final classification of this indication requires further investigation.

Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to carisoprodol or related compounds such as meprobamate, mebutamate, tybamate.

Warnings: *Idiosyncratic Reactions:* Rarely, first dose has been followed by extreme weakness, transient quadriplegia, dizziness, ataxia, temporary vision loss, diplopia, mydriasis, dysarthria, agitation, euphoria, confusion, disorientation. Symptoms usually subside during the next several hours. Supportive and symptomatic therapy, including hospitalization, may be necessary.

Pregnancy and Lactation: Safe use not established; weigh potential benefits against potential hazards in pregnancy, nurs mothers, or women of childbearing potential.

Children Under Five: Drug not recommended.

Potentially Hazardous Tasks: Driving a motor vehicle or operating machinery.

Additive Effects: Possible additive effects between carisopro alcohol, and other CNS depressants or psychotropic drugs.

Drug Dependence: Use cautiously in addiction-prone patier

Precautions: To avoid excess accumulation, use caution in patients with compromised liver or kidney function.

Adverse Reactions: *Central Nervous System:* Drowsiness, dizziness, vertigo, ataxia, tremor, agitation, irritability, headache depressive reactions, syncope, insomnia.

Allergic or Idiosyncratic: Usually seen after 1-4 doses in patie not previously exposed, e.g., rash, erythema multiforme, pruritus, eosinophilia, fixed drug eruption with cross reaction t meprobamate. More severe manifestations: asthma, fever, weakness, dizziness, angioneurotic edema, smarting eyes, hypotension, anaphylactoid shock. Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamin and in severe cases corticosteroids).

Cardiovascular: Tachycardia, postural hypotension, facial flushing.

Gastrointestinal: Nausea, vomiting, hiccup, epigastric distre

Hematologic: Leukopenia and pancytopenia (on carisoprodol plus other drugs).

Usual Adult Dosage: One 350 mg tablet three times daily and at bedtime.

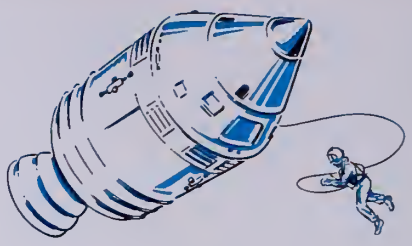
Overdosage: Has produced stupor, coma, shock, respiratory depression, and, very rarely, death. Overdosage of carisoprod plus alcohol or other CNS depressants or psychotropic drugs can be additive. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Carisoprodol is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully with related drug meprobamate. Carefully monito urinary output; avoid overhydration; observe for possible relap due to incomplete gastric emptying and delayed absorption.

Before prescribing, consult package circular or latest PDR information. Rev. 5 72

WALLACE PHARMACEUTICALS Cranbury, N. J. 08512

Soma® 350 its power may
(carisoprodol) 350 mg tablets

e measured in movement



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

(Continued from Page 608)

and the purpose of keeping unfounded or baseless cases, the filing of which would have caused harm to the reputation and practice of the doctor concerned, was substantially accomplished. When it is remembered that actually only 16 suits were filed in cases where substantial evidence of negligence had not been found, and this was out of a total of 91 cases heard, or 17-½ per cent, it would appear that the Panel Plan has indeed gone a long way toward solving the problems which gave rise to its adoption.

As to its objectiveness, the fact that 4 cases where the presence of substantial evidence of negligence was found by the Panel resulted in verdicts for the doctor, while only 1 in which negligence was not found resulted in a verdict for plaintiff, should amply demonstrate the open and fair minded approach of the Panel.

A word should be said about the place of the malpractice insurer in the picture. It goes without saying that they have a large stake in the successful operation of the Panel, and accordingly without their cooperation the Plan cannot be successful. Most insurers appreciate the advantages to the medical profession and incidentally to themselves in the successful operation of the Plan. However, there are exceptions, and one company, and probably a few others, for reasons best known to themselves, do not look favorably on the Plan. This fact has not interfered materially with the operations of the Plan in New Mexico.

In summary, it should be repeated that the Plan, as it has operated in New Mexico, has gone a long way toward eliminating the filing of groundless suits against doctors. By the same token, it has provided a method whereby expert witnesses are made available to people injured by a doctor, where the Panel has found substantial evidence that the injury resulted from the doctor's negligence, thereby assisting lawyers and their clients to proceed in cases found to have merit. All in all, it is believed that with the passage of time there is increasing acceptance of and satisfaction with the Plan, both by the Bar and medical profession in New Mexico. Whether or not a plan such as this would be equally suitable in a different type of community cannot be guaranteed. New Mexico covers a large area which is primarily rural, but with 1/3 of the population and 1/2 of the doctors located in Albuquerque. All hearings are held in Albuquerque, but doctors and lawyers from throughout the state travel to Albuquerque to sit on the Panels. No problems have been experienced because of this. It has been worth the time and effort expended by both participating professions, and gives promise of even more dividends by way of improvement of relations between the two professions directly involved, in addition to those discussed above which have come directly from the operation of the Plan.

Positions Wanted

Wanted: Emergency Room physician for Birmingham Hospital. Paying $45,000 per year for a basic 44 hour week, plus profit sharing which should range to $5,000 per year. Private patients may be admitted if desired. Fringe benefits include: paid malpractice, life and health insurance with a Keogh type retirement plan. Two weeks vacation are given the first two years and three weeks thereafter; each year, one week off for a convention with up to $550 paid for expenses. For further information contact: Robert E. Wiltsie, M. D., Director Emergency Services, East End Memorial Hospital, 7916 Second avenue South, P. O. Box 4277, Birmingham, Alabama 35206, (205) 836-3211.

Student Health Physician. Opportunity available for clinical medicine in a University of 15,000 students. Four weeks annual leave, sick leave, retirement, salary negotiable. Apply: Director, Drake Student Health Center, Auburn University, Auburn, Ala. 36830. An Equal Opportunity Employer.

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

The lesions on his face are solar/actinic— so-called "senile" keratoses... and they may be premalignant.

Solar, actinic or senile keratoses

These lesions may be called by several names, but they usually can be identified by the following characteristics. The typical lesion is flat or slightly elevated, of a brownish or reddish color, papular, dry, rough, adherent and sharply defined. They commonly occur as multiple lesions, chiefly on the exposed portions of the skin.

Sequence of therapy— selectivity of response

After several days of therapy with Efudex® (fluorouracil), erythema may begin to appear in the area of the lesions; this reaction usually reaches its height of unsightliness and discomfort within two weeks, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied.

Acceptable results

Treatment with Efudex provides highly favorable cosmetic results. Incidence of scarring is low. This is particularly important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

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Volume 43 April 1974 Number 10

The Foot–The Forgotten Part

Stanford Rosen, D. P. M.

Birmingham, Alabama

The human foot is perhaps one of the most unique organs of the body and definitely the most neglected. It and its related structures comprise a mechanism upon which man is dependent for his mobility.

The foot is seldom the sight of a mortal condition, but often is the sight and cause of morbidity, impairment, disability and limitation of activity. Due to anatomical and physiologic relationships and to the foot's function, the initial signs of systemic disease often are first manifested in our organs of locomotion. The human foot cannot be detached from the patient, but foot complaints, minor as they may seem at times, can limit mobility and the will of a person to participate in daily activities.

It must be said however, that the shortage of health personnel creates a problem for every member of the health care team, and that is, lack of time to be able to recognize minor conditions before they become major health factors, requiring hospitalization. For this reason, the management of foot conditions must represent a team approach to total patient care so that every patient may achieve a maximum degree of well being.

The purpose of this article is to present some of the more common foot problems and their treatment that you as physicians may encounter in your patients. The information will help you to recognize potential foot problems, thus you will be able to assist your patients in finding the proper specialists.

PLANTAR TYLOMA (callus)

Figures 1 and 2

Improper weight bearing and pressure is the cause of the tyloma, figure 1, as represented in figure 2. Force of pressure is represented by x's, normal force is represented by solid lines and arrows.

Figure 2 shows all weight bearing exerted on the second metatarsal head causing hypertrophy of the bone and a build up of callus in the area. In all cases, these lesions are symptoms of some internal or external pressure and represent a real danger if left untreated, treated by non-podiatric personnel, or treated by the patient himself. Perhaps the most serious cause of amputation

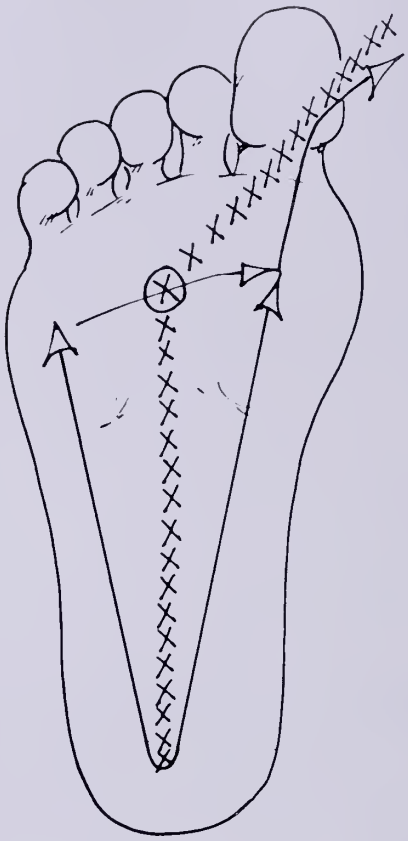

Figure 2

is associated with improper management of these lesions and use of commercial "corn cures" as a means of self care. With an associated vascular insufficiency and/or diabetes, these simple lesions many times cover a more serious ulceration, abscess, or other necrotic process. Failure to recognize the complaints of patients with painful lesions can result in osteomyelitis and other conditions that require hospitalization as seen in figure 3.

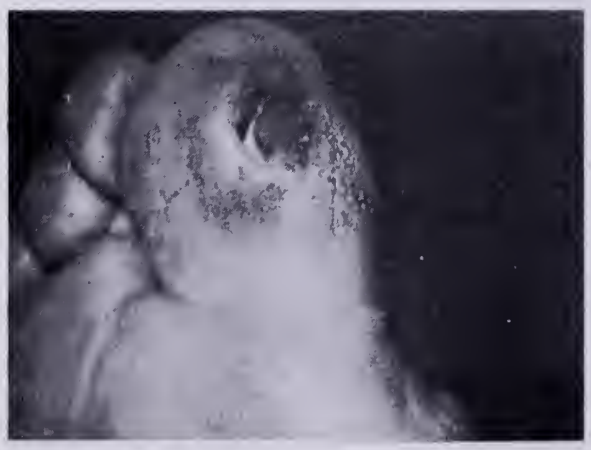

Figure 3

Both the diabetic ulceration and the ulcer associated with arteriosclerosis many times appear to have the same ischemic, or anemia - like appearance. However, the diabetic ulcer is usually covered by and surrounded by a thickened callus. The ulcer itself even appears to be healed until the callus is removed. Both must be considered potential etiological factors for amputation, and care must be exercised in their management.

Debridement, topical enzymes and oral enzymes plus the proper antibiotics as well as changes of dressings 3 times a day may prove to be routine care for ulcers of this type for a long period of time. However, constant care of these patients will prevent amputation and help maintain in them some ambulation, figure 4.

Figure 4

ONYCHAUXIS

Many times a patient's lack of a steady hand, his inability to bend or see, or even to seek professional care, will result in toenails that may be as long as 3 inches, curl on themselves, and even penetrate the sole of the foot. These conditions are known as onychauxis and onychogryphosis, with the latter denoting thickening and excessive deformity. In addition, there are many cases complicated by fungus infections, known as onychomycosis. In these instances, the nails are not only thickened but they appear moth

eaten, and have a particular odor. Their treatment should always be initiated by the podiatrist because they do need professional care. Debridement requires judgement as well as special instruments and drills, figure 5 and figure 6.

Figure 5

Figure 6

Allied deformities consist of hallux valgus, or bunion, and digiti flexus, or hammertoe. Both of these conditions are common and create deformity and pain; they are also associated with joint diseases. Their presence in the patient who must walk constantly and wear foot wear can create severe pressure over the bony prominences and produce inflammation, hyperkeratosis, and ulcerations, in addition to pain and discomfort. The ability to recognize these conditions will permit early management and treatment. The management of the mechanical foot deformities and the various systemic diseases manifesting themselves in the foot are a medical - podiatric responsibility. The surgical treatment of a bunion is now a rather simple procedure when it involves just removing the bunion as seen in figures 7+8. Procedure can be done on an ambulatory basis with a patient receiving 2 silk sutures and little or no discomfort or loss of work.

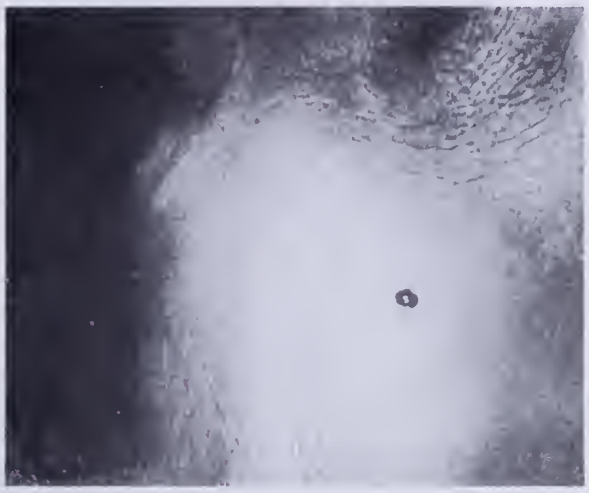

Figure 7

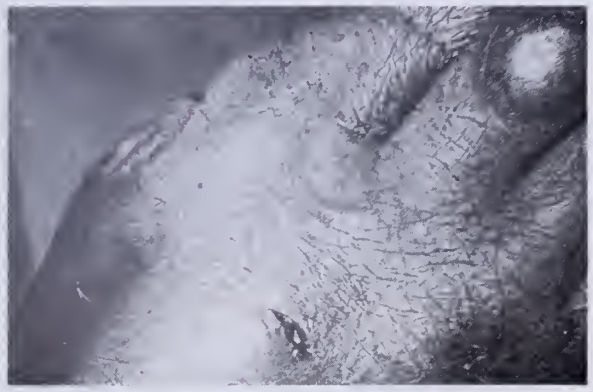

Figure 8

TINEA PEDIS

Tinea Pedis is another infection to which patients are prone. It is associated with dryness, scaling, and itching. Masceration between the toes may be present. The infection must be treated professionally. The most common complication is secondary bacterial infection, which always must be considered serious in the patient. Tinea pedis will usually respond to the prescription of a topical medication. Many types are available and effective, the best being Tinactin in the cream, oil, or powder form.

INFECTED INGROWN TOENAIL
(figure 9)

Ingrown toenails, in their true sense, many times are initiated by improper or self care. In such cases, the side of the toenail penetrates the flesh and results in infection, swelling, and redness. Granulation tissue, which is tender and bleeds, is present in cases of long standing duration and is called proud flesh. The ingrown toenail represents an infective as well as a mechanical process and can be further complicated by paronychia or severe infection, of the nail margins. When these conditions exist the treatment of choice is to remove the offending nail and clear the infection and then perform a surgical procedure to remove the offending side permanently with the use of an alcohol phenol technique.

In conclusion, I would like to say that foot problems are progressive in nature. Without the proper treatment and follow up they can only progress. The podiatrist should be used in a consultative nature for all problems of the foot. Prevention and patient education along with comfort is our prime goal. I am sure that it is mine, I hope that it is yours.

REFERENCES

I. Rosen, Stanford: Podiatry and Its Role in Diabetic Medicine, Journal of the Medical Association of the State of Alabama, Volume 42, page 274, October 1972.

II. Podiatry in Public Health, APA, Washington, D. C., January 1965.

III. Helfand, A. E.: Practice Guide for Podiatric Programs in Extended Care Facilities, J. A. P. A., 56: 221, 1966.

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase **BUN**. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

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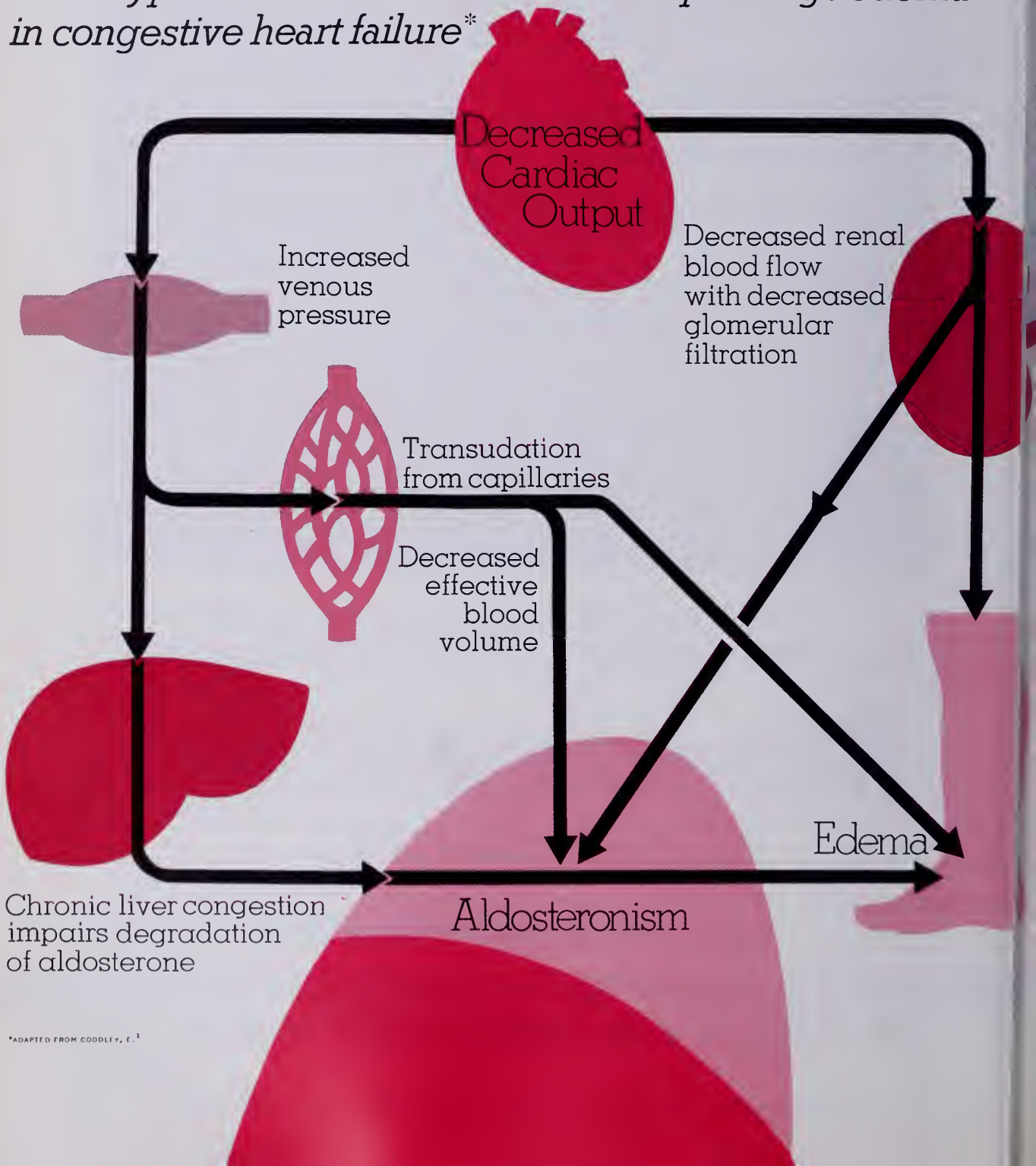
In congestive heart failure...

secondary aldosteronism

*How hyperaldosteronism leads to and prolongs edema in congestive heart failure**



*ADAPTED FROM COODLEY, E.[1]

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To "switch off" the aldosterone factor in congestive heart failure

Aldactone

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the only specific aldosterone antagonist... basic in all diuretic therapy

Three ways to use Aldactone in congestive heart failure

1. As the only diuretic

- Often sufficient alone.
- Produces gradual, sustained diuresis by blocking aldosterone action in the distal renal tubule.
- Avoids potassium loss.

2. As the basic daily diuretic with an "add-on" alternate-day-diuretic ("A.D.D." schedule)

- Can be administered daily as basic therapy with the additional agent (furosemide or ethacrynic acid) given every second or third day.
- Aldactone plus "A.D.D." schedule minimizes potassium deficiency and potentiates effect of "add-on" diuretic.[2]
- Avoids acute volume depletion and aldosterone rebound.[2]

3. As a daily diuretic in combination with a daily dose of a thiazide

- Permits daily additive diuretic effect while maintaining potassium balance.

Indications—Essential hypertension, edema or ascites of congestive heart failure cirrhosis of the liver and the nephrotic syndrome, idiopathic edema Some patients with malignant effusions may benefit from Aldactone (spironolactone), particularly when given with a thiazide diuretic

Contraindications—Acute renal insufficiency, rapidly progressing impairment of renal function, anuria and hyperkalemia

Warnings—Potassium supplementation may cause hyperkalemia and is not indicated unless a glucocorticoid is also given. Discontinue potassium supplementation if hyperkalemia develops. **Usage of any drug in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the mother and fetus.**

Precautions—Patients should be checked carefully since electrolyte imbalance may occur Although usually insignificant, hyperkalemia may be serious when renal impairment exists; deaths have occurred. Hyponatremia, manifested by dryness of the mouth, thirst, lethargy and drowsiness, together with a low serum sodium may be caused or aggravated, especially when Aldactone is combined with other diuretics. Elevation of BUN may occur, especially when pretreatment hyperazotemia exists. Mild acidosis may occur. Reduce the dosage of other antihypertensive drugs, particularly the ganglionic blocking agents, by at least 50 percent when adding Aldactone since it may potentiate their action.

Adverse Reactions—Drowsiness, lethargy, headache, diarrhea and other gastrointestinal symptoms, maculopapular or erythematous cutaneous eruptions, urticaria, mental confusion, drug fever, ataxia, gynecomastia, inability to achieve or maintain erection, mild androgenic effects, including hirsutism, irregular menses and deepening voice. Adverse reactions are infrequent and usually reversible.

Dosage and Administration—For **essential hypertension** in **adults** the daily dosage is 50 to 100 mg. in divided doses. Aldactone may be combined with a thiazide diuretic if necessary. Continue treatment for two weeks or longer since an adequate response may not occur sooner. Adjust subsequent dosage according to response of patient

For edema, ascites or **effusions** in **adults** initial daily dosage is 100 mg. in divided doses. Continue medication for at least five days to determine diuretic response; add a thiazide or organic mercurial if adequate diuretic response has not occurred Aldactone dosage should not be changed when other therapy is added. A daily dosage of Aldactone considerably greater than 75 mg may be given if necessary

A glucocorticoid, such as 15 to 20 mg of prednisone daily, may be desirable for patients with extremely resistant edema which does not respond adequately to Aldactone and a conventional diuretic. Observe the usual precautions applicable to glucocorticoid therapy; supplemental potassium will usually be necessary. Such patients frequently have an associated hyponatremia—restriction of fluid intake to 1 liter per day or administration of mannitol or urea may be necessary (these measures are contraindicated in patients with uremia or severely impaired renal function). Mannitol is contraindicated in patients with congestive heart failure, and urea is contraindicated with a history or signs of hepatic coma unless the patient is receiving antibiotics orally to "sterilize" the gastrointestinal tract.

Glucocorticoids should probably be given first to patients with nephrosis since Aldactone, although useful for diuresis, will not directly affect the basic pathologic process.

For **children** the daily dosage should provide 1.5 mg of Aldactone per pound of body weight.

References: 1. Coodley, E.: Consultant 12:106-107, 109, 111, 113, 115 (July) 1972 **2.** Thorn, G. W., and Lauler, D. P.: Am. J Med 53:673-684 (Nov.) 1972.

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Program

of the

113th ANNUAL SESSION

of the

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

SHERATON MOTOR INN—HUNTSVILLE

APRIL 18, 19, 20, 1974

The 113th Annual Session of the Medical Association of the State of Alabama will convene at 9 a.m., on Thursday, April 18, 1974, in the Ballroom of the Sheraton Motor Inn, Huntsville, Alabama.

The opening session will be called to order by E. E. Camp, M.D., President of the Association.

A tour of the Marshall Space Flight Center and Redstone Arsenal has been arranged for Thursday morning, April 18. The tour will leave the Sheraton Motor Inn at 9:45 a.m.

Two scientific sessions will be held, also in the Ballroom, featuring outstanding speakers.

Registration

The Registration Desk for Counsellors, Delegates and members of the Association will be located in the Lobby of the Sheraton Motor Inn.

The Registration Desk will be open from 8:00 a.m., until 5:00 p.m., on Thursday and Friday, April 18 and 19, and from 7:30 a.m. until 10:30 a.m., on Saturday.

Counsellors and Delegates may register in advance and claim their badges, a copy of the official program and any other material upon which they will be called to make decisions after signing the official registration card at the Registration Desk.

Members and guests also will be required to sign official registration cards, which may be obtained at the Registration Desk at the times stated above.

Reference Committees

Reference Committee A (Legal-Legislative and Socio Economics) Richard F. Bliss, M.D., Chairman, John T. Mooresmith, Staff Consultant, will convene in the Apollo Room; Reference Committee B (Organization and Administration) H. Cotton Ray, M.D., Chairman, L. P. Patterson, Staff Consultant, will convene in the State Room; and Reference Committee C (Medical Practice and Medical Education) James A. Robeson, M.D., Chairman, Larry Dixon, Staff Consultant, will convene in the Gemini Room to hear opinions of the members on all important issues at 2:00 p.m., on Thursday, April 18, 1974.

Exhibitor's Registration

Representatives of Scientific and Commercial exhibitors may register at the Registration Desk beginning at 1:00 p.m., on Wednesday, April 17.

Badges

No person will be admitted to any scientific, business or social session of the Association, or to the exhibit area, without an official badge.

Speakers

Speakers will be called in the order in which they appear on the program. Should a speaker be absent when called, his paper will be passed and called again upon conclusion of the program.

Hotel Reservations

Headquarters hotel will be the Sheraton Motor Inn. Priority for the limited number of rooms available has been assigned to Counsellors, Delegates, Officers of the Association and guest speakers. When the supply of rooms is exhausted, applicants will be referred to other nearby hotels and motels.

Social Events

A full listing of social events of the 113th Annual Session is published in the official program, available at the time of registration.

Tickets

Tickets for social events should be purchased in advance if possible. Otherwise, a limited number will be available at the Registration Desk.

Specialty Groups

Scientific presentations of medical specialty groups will be scheduled either before or after the Annual Session in conformance with the Constitution and Ordinances which forbid this type of meeting during the three days allotted to the Annual Session. Social events for specialty groups and alumni organizations will be held at places and times to be announced in the official program.

Auxiliary Luncheon

The Woman's Auxiliary to the Medical Association of the State of Alabama will hold its 51st Annual Luncheon on Thursday, April 18 at 12:30 p.m., at the Carriage Inn Motor Hotel.

Madison County Medical Society Entertainment

The Madison County Medical Society will sponsor a Reception on April 18, 1974, at 7 p.m., Buffet Dinner at 8 p.m., and Dancing at 9 p.m., in the Empire and Capital Rooms.

ALAPAC Luncheon

The Annual ALAPAC Luncheon will be held in the Ballroom of the Sheraton Motor Inn at 12:30 p.m., on Friday, April 19, 1974. Mr. Roy Pfautch, President, Civic Services, Inc., Political Campaign Management Consultants, will be guest speaker.

Awards Dinner

The Awards Dinner will be held in the Ballroom of the Sheraton Motor Inn at 7:30 p.m., on Friday, April 19. The dinner will be sponsored by the Committee on Community Affairs in honor of the winners of the 1974 awards, past presidents and members of the Fifty Year Club. The following new members will be inducted into the Fifty Year Club.

John Leslie Carmichael, M.D.
Hugh Ellison Gray, M.D.
Thomas Quincy Harbour, M.D.
Fritz Kant, M.D.
John Archie Martin, M.D.
Benjamin Wilberne McNease, M.D.
William Chunn Parsons, M.D.
Grady Oscar Segrest, M.D.
Archie Edwin Thomas, M.D.
William Walden White, M.D.
William Edward Wilson, M.D.

Awards will be presented by A. M. Brown, M.D., Chairman of the Committee on Community Affairs to the following:

The William Henry Sanders Award for outstanding work above and beyond the call of duty by a full-time public health worker to George E. Hardy, M.D., Jefferson County Health Officer.

Douglas L. Cannon Medical Reporter Award to reporters, editors or publishers, of an Alabama newspaper, or to radio-television personalities who have shown excellence in factual reporting of medical news and for outstanding effort in evaluating medical news coverage: Mr. Barry J. Casebolt, Huntsville Times Reporter.

Exhibitor's Reception

The annual reception for representatives of exhibitors at the 113th Annual Session will be held from 4:00 p.m. to 5:00 p.m., on Wednesday, April 17 in the State Room of the Sheraton Motor Inn. Officers and members of the Board of Censors will be hosts at this reception.

Host of the Association

Official host of the Association will be the Madison County Medical Society, E. E. Litkenhous, M.D., President. A Host Committee will be assigned to provide transportation and escorts for visiting dignitaries.

Board of Censors

The Board of Censors will meet at 9:00 a.m., on Wednesday, April 17, 1974 in the Gemini Room of the Sheraton Motor Inn to transact official business concerning the State Board of Medical Examiners and the State Committee of Public Health: Upon completion of discussions relating to the Board of Medical Examiners and the Committee of Public Health, the Board of Censors will convene to officially consider Association Affairs.

Alumni Meetings

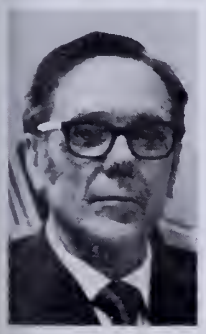
The University of Alabama Alumni and the Caduceus Club will sponsor a Reception in the Mercury Room from 6:30 p.m., to 7:30 p.m., Thursday, April 18.

The Tulane Alumni Association will hold a reception in the Apollo Room, Thursday, April 18, 6:00 p.m.

The President's Prayer Breakfast is scheduled for 7:30 a.m., Friday, April 19, in the State Room of the Sheraton Motor Inn. Tickets will be on sale at the Registration Desk for all members and their wives.

PROGRAM
Opening Session
Thursday, April 18, 1974
Ballroom
Sheraton Motor Inn
Huntsville, Alabama

E. E. Camp, M.D.
Huntsville
President, Presiding



9:00 A.M.

Call to Order

Invocation: Dr. John Rutland
Trinity United Methodist Church
Huntsville

9:05 A.M.
Welcome Address

Honorable Joe W. Davis
Mayor, City of Huntsville

9:10 A.M.
Welcome Address

Edward E. Litkenhous, Jr., M.D.
President, Madison County
Medical Society

9:15 - 9:45 A.M.
PRESIDENT'S MESSAGE
E. E. Camp, M.D., Huntsville

9:45 A.M.
RECESS TO TOUR SPACE CENTER

AUXILIARY LUNCHEON
Thursday, April 18, 1974
Ballroom - Carriage Inn Motel

12:30 P.M.

Mrs. Robert Grady, Helena
President, Presiding

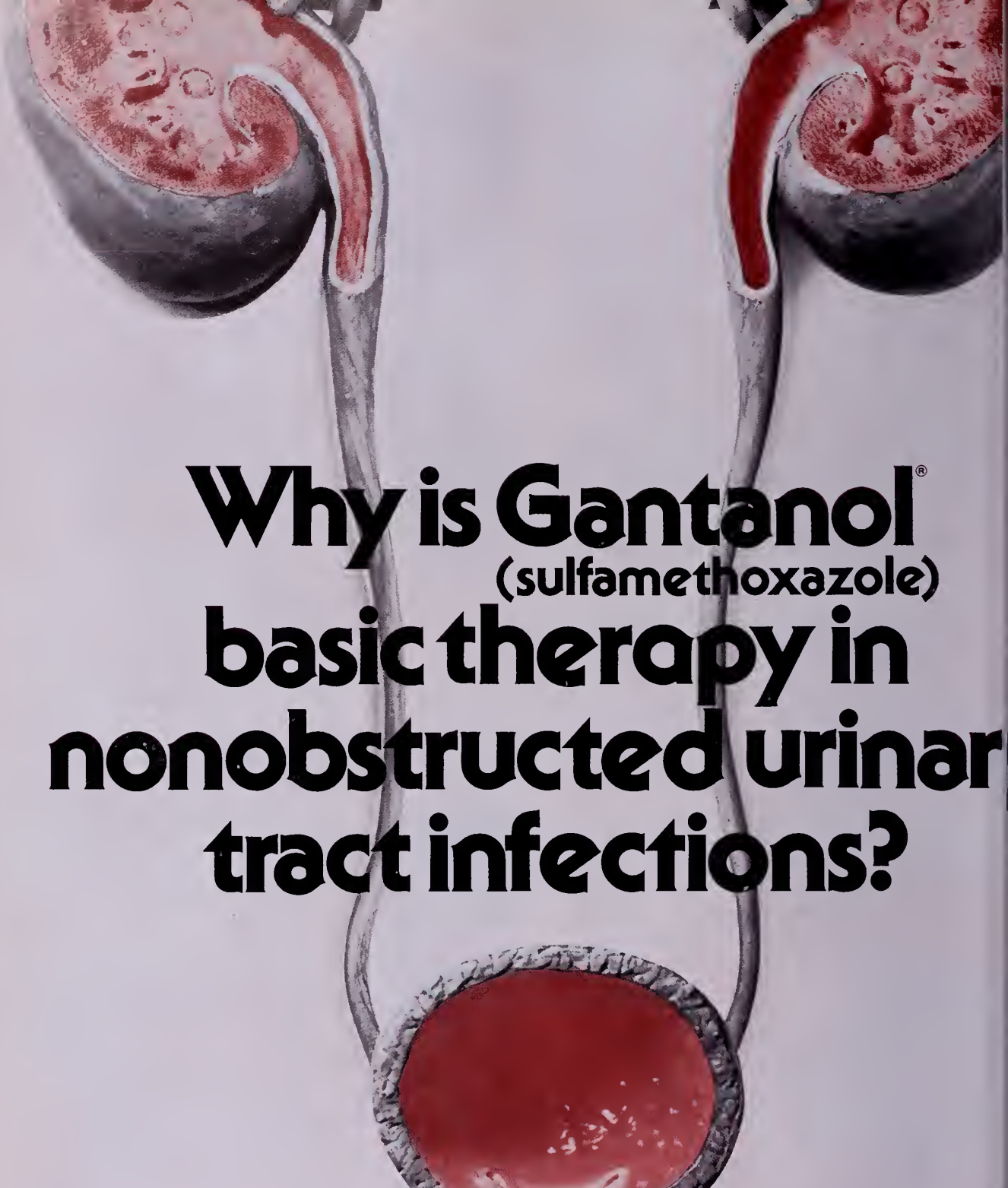
Invocation

Introduction of Guests
Mrs. Grady

Presentation of AMA-ERF Contribution to James Allen Pittman, Jr., Dean, University of Alabama School of Medicine, Birmingham, and Robert Bucher, Dean, University of South Alabama School of Medicine, Mobile, by Mrs. Howard Johnson, AMA-ERF Chairman.

Speaker

Dr. Henry M. Johnson
Louisville, Kentucky



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Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic strep-

tococcal infections and will not eradicat vent sequelae (rheumatic fever, glomerulo of such infections. Deaths from hypersensiti tions, agranulocytosis, aplastic anemia and ot dyscrasias have been reported and early clinical si throat, fever, pallor, purpura or jaundice) may indicat blood disorders. Frequent CBC and urinalysis with mi examination are recommended during sulfonamide therap cient data on children under six with chronic renal diseas

Precautions: Use cautiously in patients with impaire hepatic function, severe allergy, bronchial asthma; in gl phosphate dehydrogenase-deficient individuals in who related hemolysis may occur. Maintain adequate fluid prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytos tic anemia, thrombocytopenia, leukopenia, hemolytic ane

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- for efficacy in nonobstructed cystitis, pyelonephritis and pyelitis
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Tablets/Suspension
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hypoprothrombinemia and methemoglobinemia); *allergic ions* (erythema multiforme, skin eruptions, epidermal necroly- urticaria, serum sickness, pruritus, exfoliative dermatitis, ana- actoid reactions, periorbital edema, conjunctival and scleral tion, photosensitization, arthralgia and allergic myocarditis); *ointestinal reactions* (nausea, emesis, abdominal pains, hepa- diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* dache, peripheral neuritis, mental depression, convulsions, a, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous ions* (drug fever, chills, toxic nephrosis with oliguria and a, periarteritis nodosa and L.E. phenomenon). Due to certain nical similarities with some goitrogens, diuretics (acetazola- , thiazides) and oral hypoglycemic agents, sulfonamides have ed rare instances of goiter production, diuresis and hypogly- a as well as thyroid malignancies in rats following long-term nistration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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REFERENCE COMMITTEE HEARINGS
Thursday, April 18, 1974
2:00 - 5:00 P.M.

Reference Committee A
(Legal-Legislative and Socio Economics)
Apollo Room (West Wing)

Richard F. Bliss, M.D., Chairman
Francis L. Crocker, Jr., M.D.
E. Everett Hale, Jr., M.D.
Roland E. Murphree, M.D.
A. Grayson Simmons, M.D.

John T. Mooresmith
Staff Consultant

Reference Committee B
(Organization and Administration)
State Room (Lobby)

H. Cotton Ray, M.D., Chairman
James A. Greene, M.D.
William O. Owings, M.D.
Charles L. Rutherford, Jr., M.D.
J. Kendall Black, M.D.

L. P. Patterson
Staff Consultant

Reference Committee C
(Medical Practice and Medical Education)
Gemini Room (West Wing)

James A. Robeson, M.D., Chairman
C. P. St. Amant, M.D.
Gordon C. Ussery, M.D.
William E. Davis, M.D.
John E. Campbell, M.D.

Larry Dixon
Staff Consultant

ORIENTATION PROGRAM
Ballroom - 2:00 - 5:00 P.M.
Thursday, April 18, 1974

J. Garber Galbraith, M.D.
Birmingham
President-Elect, Presiding

THEME: ORGANIZATIONS OF MEDICINE

2:00 - 2:30 P.M.

Malcolm C. Todd, M.D.
Long Beach, California
President-Elect
American Medical Association
Subject: "The AMA at Your Service"

2:30 - 3:00 P.M.

Honorable M. R. Nachman Montgomery, President, Alabama Bar Association
Subject: "The Physician and the Law"

3:00 - 3:20 P.M.

BREAK TO VIEW EXHIBITS

3:20 - 3:50 P.M.

James J. McNamara, Assistant Director, Corporate Law Department, Office of General Counsel, American Medical Association. Subject: "The Business Side of Medicine"

3:50 - 4:20 P.M.

Wayne Bradley, Assistant Directo
American Medical Association
Washington Bureau
Subject: 'PSRO And All Those Other Government Programs'

4:20 - 5:00 P.M.

J. Garber Galbraith, M.D., Birmingham, President-Elect, Medical Association of the State of Alabama. Subject: "Your Stake in Organized Medicine"

6:00 P.M.

Tulane Alumni Association Reception
Apollo Room (West Wing)

6:30 - 7:30 P.M.

Alabama Alumni Association
and Caduceus Club Reception
Mercury Room (Lobby)

7:00 P.M.

Madison County Medical Society
Reception - State Room (Lobby)

8:00 P.M.

Madison County Medical Society
Buffet Dinner - Ballroom

9:00 P.M.

Dancing, Ballroom

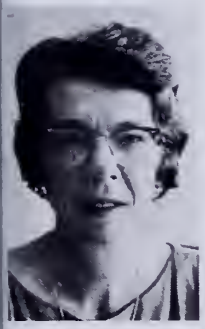
Friday, April 19, 1974
7:30 A.M.

President's Prayer Breakfast
State Room
Dr. A. A. Stamler, Presiding

FIRST SCIENTIFIC SESSION

Ballroom

E. E. Camp, M.D., Huntsville
President, Presiding



9:00 - 9:40 A.M.

Phyllis Q. Edwards, M.D.
Chief, Tuberculosis Branch,
Bureau of State Services
Department of Health, Education
and Welfare, Atlanta, Georgia
Subject: "Present Concepts of
Treating Tuberculosis"

9:40 - 10:20 A.M.

Shervert Frazier, M.D.
Professor and Chief of Psychiatry
The McLain Hospital
Belmont, Massachusetts
Subject: "Criminal Behavior
Involving Massachusetts
Homocides"

BREAK TO VIEW EXHIBITS

10:40 - 11:30 A.M.

THE JEROME COCHRAN LECTURE
Tom E. Nesbitt, M.D.
Speaker, House of Delegates
American Medical Association
Chicago, Illinois

11:30 - 12:15 P.M.

**CAUCUS OF
COUNSELLORS AND DELEGATES**

ALAPAC LUNCHEON
Friday, April 19, 1974
Ballroom
12:30 P.M.

Grover C. Murchison, Jr., M.D.
Montgomery
Chairman, ALAPAC, Presiding

Invocation
Rev. Bernard H. Ansorge
The Ascension Lutheran Church
Huntsville, Alabama

Speaker
Mr. Roy Pfautch, President, Civic Services, Inc.,
Political Campaign Management Consultants

Adjourn

SECOND SCIENTIFIC SESSION

Friday, April 19, 1974
Ballroom

E. E. Camp, M.D., Huntsville
President, Presiding

2:00 - 2:40 P.M.

Joseph P. Kerwin, M.D.
Huntsville
Science Pilot for
First Sky Lab Mission

2:40 - 3:20 P.M.

Andrew Bruce Weiss, M.D.
Birmingham
Orthopaedic Surgeon
University of Alabama
School of Medicine

Raymond N. Hiramoto, M.D., Professor of Microbiology, Department of Microbiology, University of Alabama in Birmingham.

Subject: "Group Effort on Tumors Primary to Bone with Special Emphasis on Osteogenic Sarcoma"

3:20 - 3:40 P.M.
COFFEE BREAK - EXHIBIT ROOM

3:40 - 4:20 P.M.

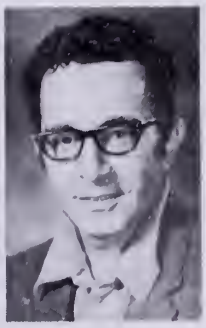
Gayle Stephens, M.D., Dean
University of Alabama
at Huntsville
Subject: "New Concepts In Family Practice Teaching"

4:20 - 5:00 P.M.

Mr. Kenny Howard
Auburn University, Auburn
Subject: "Athletic Injuries"

AWARDS DINNER
Friday, April 19, 1974
7:30 P.M. Ballroom

A. M. Brown, M.D., Gadsden
Chairman, Committee on Community Affairs
Presiding



Invocation

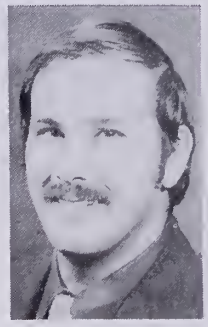
A. A. Stamler, M.D., Decatur
Chairman, Committee on
Medicine and Religion

AWARDS PRESENTATIONS:

The William Henry Sanders Award to:

George E. Hardy, M.D.
Birmingham
Jefferson County Health Officer

The Douglas L. Cannon Medical Reporter Award to:



Mr. Barry J. Casebolt
Madison
Huntsville Times Reporter

Introduction of Distinguished Guests and Fraternal Delegates

E. E. Camp, M.D., President
Medical Association
of the State of Alabama

Presentation of Fifty Year Club Members

John Leslie Carmichael, M.D.
Birmingham
Hugh Ellison Gray, M.D., Anniston
Thomas Quincy Harbour, M.D.
Ashville
Fritz Kant, M.D., Birmingham
John Archie Martin, M.D.
Montgomery
Benjamin Wilberne McNease, M.D.
Fayette
William Chunn Parsons, M.D.
Birmingham
Grady Oscar Segrest, M.D., Mobile
Archie Edwin Thomas, M.D.
Montgomery
William Walden White, M.D., Centre
William Edward Wilson, M.D.
Russellville

Introduction of Past Presidents

F. M. Phillippi, M.D., Brewton
A. E. Thomas, M.D., Montgomery
O. Emfinger, M.D., Union Springs
C. Kermit Pitt, M.D., Decatur
E. L. McCafferty, Jr., M.D., Mobile
E. Bryce Robinson, M.D., Birmingham
J. O. Finney, M.D., Birmingham
James G. Donald, M.D., Mobile
E. B. Glenn, M.D., Birmingham
James G. Daves, M.D., Cullman
M. Vaun Adams, M.D., Mobile
Hugh E. Gray, M.D., Anniston
Edgar G. Givhan, Jr., M.D., Birmingham
John A. Martin, M.D., Montgomery
Grady O. Segrest, M.D., Mobile
J. Orville Morgan, M.D., Gadsden
B. W. McNease, M.D., Fayette
T. Brannon Hubbard, M.D., Montgomery
Joseph M. Weldon, M.D., Mobile
J. Paul Jones, M.D., Camden
James R. Garber, M.D., Birmingham
J. D. Heacock, M.D., Birmingham

ENTERTAINMENT

ANNUAL BUSINESS SESSION
Saturday, April 20, 1974
Ballroom

E. E. Camp, M.D., Huntsville
President, Presiding

9:00 A.M.

Presentation by the Woman's Auxiliary to the Medical Association of the State of Alabama:

(1) Report of State Department of Public Health, Ira L. Myers, M.D., State Health Officer.

(2) Report of the State Board of Medical Examiners

(3) Report of the Board of Censors on Association Affairs

(a) Approval of the 1973 Transactions
(b) Unfinished Business—Consideration of Reports and Pending Resolutions
(c) New Business
(d) Adoption of Reference Committees
(e) Revision of the Rolls
(f) Election and Installation of Officers
(g) Adjourn

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Precautions: As with other thyroid preparations, an overdosage of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's Disease (chronic adrenocortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to pa with cardiovascular disease; developme chest pains or other aggravations of card cular disease requires a reduction in dosag

Contraindications: Thyrotoxicosis, acute my dial infarction. **Side effects:** The effects of THROID (sodium levothyroxine) therapy are in being manifested. Side effects, when th occur, are secondary to increased rates of metabolism; sweating, heart palpitations or without pain, leg cramps, and weight Diarrhea, vomiting, and nervousness have been observed. Myxedematous patients heart disease have died from abrupt incr in dosage of thyroid drugs. Careful observ of the patient during the beginning of an roid therapy will alert the physician to an toward effects.

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1 *Synthroid* is T_4.

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most cases with side effects, a reduction of ıge followed by a more gradual adjustment ard will result in a more accurate indication e patient's dosage requirements without the earance of side effects.

age and Administration: The activity of 1 mg. SYNTHROID (sodium levothyroxine) LET is equivalent to approximately one grain oid, U.S.P. Administer SYNTHROID tablets single daily dose. In hypothyroidism with- myxedema, the usual initial adult dose is ng. daily, and may be increased by 0.1 mg. y 30 days until proper metabolic balance is ned. Clinical evaluation should be made thly and PBI measurements about every 90 . Final maintenance dosage will usually e from 0.2-0.4 mg. daily. In adult myxedema, ing dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, U.S.P., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. *49*:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

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CONTINUING MEDICAL EDUCATION

Larry Dixon

The Education Department is initiating a Continuing Medical Education quiz which will appear in this space in alternate issues. The column is possible because of a willingness to share the results of their efforts by the American College of Physicians and Edward C. Rosenow, Jr., M. D., Executive Vice-President. Dr. Rosenow has given MASA permission to utilize the ACP's *Medical Knowledge Self-Assessment Program* ‡2 which was published in January, 1971. All questions and answers are provided by the ACP.

DIRECTIONS: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is BEST in each case and circle.

1. A 15-year old girl progressively deteriorated intellectually over a two-month period. Examination showed dementia, mild spastic paraplegia and myoclonic jerks. No cells were found in the cerebrospinal fluid, but the colloidal gold curve showed first-zone elevation. The electroencephalogram showed regular periodic spike potentials. An increase in serum measles antibodies occured during the course of the illness.

   Which of the following is the most likely diagnosis?

   A. Systemic lupus erythematosus

   B. Congenital syphilis

   C. Vogt-Koyanagi-Harada (uveomening-oencephalitic) syndrome

   D. Subacute sclerosing panencephalitis

   E. Congenital agammaglobulinemia

2. Wernicke's encephalopathy usually seen in vitamin deficiency states due to ingestion of alcohol is characterized by which of the following?

   A. Ataxia, spastic paralysis of the extremities and peripheral neuritis.

   B. Confusion and peripheral neuritis.

   C. Ataxia, ophthalmoplegia and an amnesic state.

   D. Convulsions and peripheral neuritis.

   E. Cirrhosis of the liver, tremulousness and hallucinations.

3. A 25-year-old woman is found to have asymmetric pupils, the left one being large, oval and poorly reactive to light and accommodation. She also has absent knee and ankle reflexes. Which of the following diagnoses would explain these findings?

   A. Argyll Robertson pupil.

   B. Horner's syndrome.

   C. Oculomotor (III) nerve paralysis in a diabetic person

   D. Adie's syndrome

   E. Tentorial herniation

4. Monocular visual loss may be caused by a lesion of:

   A. the visual cortex

   B. the optic radiation

   C. the lateral geniculate body

   D. the optic tract

   E. none of the above.

(Continued on Page 638)

The Passion of Christ from a Medical Point of View

C. Truman Davis, M. D., M. S.

EDITOR'S NOTE: *This article is reprinted from the April 1966, Journal of The Medical Association of the State of Alabama. Reprints are available on request.*

In this paper, I shall discuss some of the physical aspects of the passion, or suffering, of Jesus Christ. We shall follow Him from Gethsemane, through His trial, His scourging, His path along the Via Dolorosa, to His last dying hours on the cross.

I became interested in this about a year ago when I read an account of the crucifixion in Jim Bishop's book, The Day Christ Died. I suddenly realized that I had taken the Crucifixion more or less for granted all these years—that I had grown callous to its horror by a too easy familiarity with the grim details—and a too distant friendship with Him. It finally occurred to me that as a physician I didn't even know the actual immediate cause of death. The Gospel writers don't help us very much on this point, because crucifixion and scourging were so common during their lifetime that they undoubtedly considered a detailed description totally superfluous—so we have the concise words of the Evangelists: "Pilate, having scourged Jesus, delivered Him to them to be crucified—and they crucified Him."

I am indebted to many who have studied this subject in the past, and especially to a contemporary colleague, Dr. Pierre Barbet, a French surgeon who has done exhaustive historical and experimental research and has written extensively on the subject.

Dr. Davis is an ophthalmologist in private practice in Mesa, Arizona. He is a lay reader in the Episcopal Church.

The study of the Crucifixion is a portion of a manuscript on medicine and the Bible which is now in preparation for publication. The artifacts shown in the illustration are replicas prepared from archeological and Biblical data.

The infinite psychic and spiritual suffering of the Incarnate God in atonement for the sins of fallen man I have no competence to discuss; however, the physiological and anatomical aspects of our Lord's passion we can examine in some detail . . . what did the body of Jesus of Nazareth actually endure during those hours of torture?

This led me first to a study of the practice of crucifixion itself; that is, the torture and execution of a person by fixation to a cross. Apparently, the first known practice of crucifixion was by the Persians. Alexander and his generals brought it back to the Mediterranean world—to Egypt and to Carthage. The Romans apparently learned the practice from the Carthaginians and (as with almost everything the Romans did) rapidly developed a very high degree of efficiency and skill in carrying it out. A number of Roman authors (Livy, Cicero, Tacitus) comment on it. Several innoventions and modifications are described in the ancient literature; I'll mention only a few which may have some bearing here. The upright portion of the cross (or stipes) could have the cross-arm (or patibulum) attached two or three feet below its top—this is what we commonly think of today as the classical form, of the cross (the one which we have later named the Latin cross); however, the common form used in our Lord's day was the Tau cross (shaped like the Greek letter Tau or like our T). In this cross the patibulum was placed in a notch at the top of the stipes. There is fairly overwhelming archeological evidence that it was on this type of cross that Jesus was crucified.

The upright post, or stipes, was generally permanently fixed in the ground at the site of execution and the condemned man was forced to carry the patibulum, apparently weighing about 110 pounds, from the prison

(Continued of Page 642)

(Continued from Page 636)

5. A 60-year-old woman, known to have had hypertension for many years, is admitted to the hospital because of severe headaches, confusion, nausea and vomiting. On examination she is found to have a blood pressure of 240/120 mm Hg; papilledema, hemorrhages, exudates and focal arteriolar spasm in the retina; and minimal right hemiparesis.

   The most likely diagnosis is:

   A. intracerebral hemorrhage

   B. primary cerebral neoplasm

   C. hypertensive encephalopathy

   D. ischemic cerebral infarct

   E. cerebral embolism

6. Weakness, spasticity and impairment of sensation in the lower limbs is encountered in:

   A. polymyositis

   B. lumbar disk protrusion

   C. subacute combined degeneration of the spinal cord.

   D. amyotrophic lateral sclerosis

   E. myasthenia gravis

7. A 45-year-old woman complaining of blurred vision was found to have bilateral interstitial keratitis. Six weeks later vertigo, ataxia and bilateral deafness developed, progressing rapidly over a three-day period.

   Which of the following is likely to be present?

   A. Antibiotic toxicity

   B. Polyarteritis

   C. Syphilis

   D. Multiple sclerosis

   E. Heredopathia a t a c t i c a polyneuritiformis (Refsum's disease)

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8. A 22-year-old girl has been brought to the hospital unconscious, 2½ hours after known ingestion of a large dose of barbiturate. Which of the following methods of management would be most helpful?

   A. Maintain a clear airway and artificially assist ventilation if there is unsatisfactory exchange of air.

   B. Accomplish immediate gastric lavage with warm tap water.

   C. Administer an analeptic drug.

   D. Accomplish immediate hemodialysis with an artificial kidney.

   E. Administer concentrated dextrose intravenously.

Answers to Continuing Education Quiz:
1-D, 2-C, 3-D, 4-E, 5-C, 6-C, 7-B, 8-A

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The label on your bottle of prescription pills reads "Take three times a day, with meals."

The question is—Would you take these pills *before* each meal, in the *middle* of each meal, or *after* each meal? And does it really make any difference?

Yes, it does make a difference. Some medicines are best taken on a full stomach to minimize gastric irritation. Others are best taken on an empty stomach to facilitate absorption.

The prescription label should have been more specific. Such as "Take 30 minutes *before* mealtimes."

In a study at a hospital in Rochester, New York, 67 patients were asked to interpret instructions on each of ten prescription labels.

"Not once was a label uniformly interpreted by all patients," the study found.

It's not difficult to understand why imprecise instructions, such as those cited above, would not be correctly understood. However, with five prescriptions whose instructions were not ambiguous, the frequency of interpretive errors ranged from 9 per cent to 64 per cent.

The lesson is clear for the physician, the research group declares. He must be explicit in his prescription labels.

"These observations illustrate the need for physicians to provide medication instructions that are consistent with the patient's daily activities and to review these instructions with the patient," they say.

NEW! Patient Therapy Packs

Because many patients tend to stop treatment prematurely, the full course of b.i.d. therapy is now specially packaged to encourage patients to complete the full course of therapy.

CANDEPTIN Vaginal Ointment Therapy Pack—two 75 gm. tubes
CANDEPTIN Vagelettes Therapy Pack—28 vaginal capsules
CANDEPTIN Vaginal Tablet Therapy Pack—28 vaginal tablets

Brief Summary

Description: CANDEPTIN (Candicidin) Vaginal Ointment contains a dispersion of Candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate.

CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.

Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.

Indications: Vaginitis due to *Candida albicans* and other *Candida* species.

Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.

Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.

Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in a Patient Therapy Pack, containing two 75 gm. tubes with two applicators for the full course of treatment. CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN Vagelettes Vaginal Capsules are packaged in a Patient Therapy Pack, containing 28 CANDEPTIN Vagelettes Vaginal Capsules (2 boxes of 14), for the full course of treatment. Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References:

1. Melges, F. J.: Obstet. Gynecol. *24*:921, Dec. 1964. **2.** Cameron, P. F.: Practitioner *202*:695, May 1969. **3.** Olsen, J. R.: Journal-Lancet *85*: 287, July 1965. **4.** Giorlando, S. W.: OB/GYN Digest *13*:32, Sept. 1971. **5.** Decker, A.: Case Reports on file, Medical Department, Julius Schmid. **6.** Friedel, H. J.: Md. State Med. J. *15*:36, Feb. 1966. **7.** Roberts, C. L. and Sullivan, J. J.: Calif. Med. *103*:109, Aug. 1965. **8.** Giorlando, S. W., Torres, J. F. and Muscillo, G.: Am. J. Obstet. Gynecol. *90*:370, Oct. 1, 1964. **9.** Abruzzi, W. A.: Western Med. *5*:62, Feb. 1964.

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- Sensitivity and temporary irritation with CANDEPTIN (candicidin) Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules have been extremely rare.

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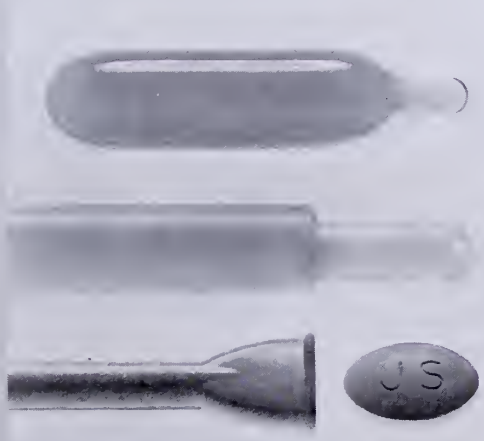

VAGELETTES™ Vaginal Capsules

Vaginal Ointment

Vaginal Tablets

(Continued from Page 637)

to the place of execution. Without any historical or biblical proof, medieval and Renaissance painters have given us our picture of Christ carrying the entire cross. Many of these painters and most of the sculptors of crucifixes today show the nails through the palms. Roman historical accounts and experimental work have shown that the nails were driven between the small bones of the wrists and not through the palms. Nails driven through the palms will strip out between the fingers when they support the weight of a human body. The misconception may have come about through a misunderstanding of Jesus' words to Thomas, "Observe my hands." Anatomists, both modern and ancient, have always considered the wrists as part of the hand.

A titulus, or small sign, stating the victim's crime was usually carried at the front of the procession and later nailed to the cross above the head. This sign with its staff nailed to the top of the cross would have given it somewhat the characteristic form of the Latin cross.

The physical passion of the Christ begins in Gethsemane. Of the many aspects of this initial suffering, I shall only discuss the one of physiological interest; the bloody sweat. It is interesting that the physician of the group, St. Luke, is the only one to mention this. He says, "And being in agony, He prayed the longer. And his sweat became as drops of blood, trickling down upon the ground."

Every attempt imaginable has been used by modern scholars to explain away this phase, apparently under the mistaken impression that this just doesn't happen.

A great deal of effort could be saved by consulting the medical literature. Though very rare, the phenomenon of Hematidrosis, or bloody sweat, is well documented. Under great emotional stress, tiny capillaries in the sweat glands can break, thus mixing blood with sweat. This process alone could have produced marked weakness and possible shock.

We shall move rapidly through the betrayal and arrest; I must stress again that important portions of the Passion story are missing from this account. This may be frustrating to you, but in order to adhere to our purpose of discussing only the purely physical aspects of the Passion, this is necessary. After the arrest in the middle of the night, Jesus was brought before the Sanhedrin and Caiphas, the High Priest; it is here that the first physical trauma was inflicted. A soldier struck Jesus across the face for remaining silent when questioned by Caiphas. The palace guards then blindfolded Him and mockingly taunted Him to identify them as they each passed by, spat on Him, and struck Him in the face.

In the early morning, Jesus, battered and bruised, dehydrated, and exhausted from a sleepless night, is taken across Jerusalem to the Praetorium of the Fortress Antonia, the seat of government of the Procurator of Judea, Pontius Pilate. You are, of course, familiar with Pilate's action in attempting to pass responsibility to Herod Antipas, the Tetrarch of Judea. Jesus apparently suffered no physical mistreatment at the hands of Herod and was returned to Pilate. It was then, in response to the cries of the mob, that Pilate ordered Bar-Abbas released and condemned Jesus to scourging and crucifixion. There is much disagreement among authorities about scourging as a prelude to crucifixion. Most Roman writers from this period do not associate the two. Many scholars believe that Pilate originally ordered Jesus scourged as his full punishment and that the death sentence by crucifixion came only in response to the taunt by the mob that the Procurator was not properly defending Caesar against this pretender who claimed to be the King of the Jews.

Preparations for the scourging are carried out. The prisoner is stripped of His clothing and His hands tied to a post above His head. It is doubtful whether the Romans made any attempt to follow the Jewish law in this matter of scourging. The Jews had an ancient law prohibiting more than forty lashes.

(Continued on Page 644)

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(Continued from Page 642)

The Pharisees, always making sure that the law was strictly kept, insisted that only thirty-nine lashes be given. (In case of a miscount, they were sure of remaining within the law.) The Roman legionnaire steps forward with the flagrum (or flagellum) in his hand. This is a short whip consisting of several heavy, leather thongs with two small balls of lead attached near the ends of each. The heavy whip is brought down with full force again and again across Jesus' shoulders, back and legs. At first the heavy thongs cut through the skin only. Then, as the blows continue, they cut deeper into the subcutaneous tissues, producing first an oozing of blood from the capillaries and veins of the skin, and finally spurting arterial bleeding from vessels in the underlying muscles. The small balls of lead first produce large, deep bruises which are broken open by subsequent blows. Finally the skin of the back is hanging in long ribbons and the entire area is an unrecognizable mass of torn, bleeding tissue. When it is determined by the centurian in charge that the prisoner is near death, the beating is finally stopped.

The half-fainting Jesus is then untied and allowed to slump to the stone pavement, wet with His own blood. The Roman soldiers see a great joke in this provincial Jew claiming to be a king. They throw a robe across His shoulders and place a stick in His hand for a scepter. They still need a crown to make their travesty complete. A small bundle of flexible branches covered with long thorns (commonly used for firewood) are plaited into the shape of a crown and this is pressed into His scalp. Again there is copious bleeding (the scalp being one of the most vascular areas of the body.) After mocking Him and striking Him across the face, the soldiers take the stick from His hand and strike Him across the head, driving the thorns deeper into His scalp. Finally, they tire of their sadistic sport and the robe is torn from His back. This had already become adherent to the clots of blood and serum in the wounds, and its removal, just as in the careless removal of a surgical bandage, causes excruciating pain . . . Almost as though He were again being whipped—and the wounds again begin to bleed.

In deference to Jewish custom, the Romans return His garments. The heavy patibulum of the cross is tied across His shoulders, and the procession of the condemned Christ, two thieves and the execution detail of Roman soldiers, headed by a centurian, begins its slow journey along the Via Dolorosa. In spite of His efforts to walk erect, the weight of the heavy wooden beam, together with the shock produced by copious blood loss, is too much. He stumbles and falls. The rough wood of the beam gouges into the lacerated skin and muscles of the shoulders. He tries to rise, but human muscles have been pushed beyond their endurance. The centurian, anxious to get on with the crucifixion, selects a stalwart North African onlooker, Simon of Cyrene, to carry the cross. Jesus follows, still bleeding and sweating the cold, clammy sweat of shock. The 650 yard journey from the fortress Antonia to Golgotha is finally completed. The prisoner is again stripped of His clothes—except for a loin cloth which is allowed the Jews.

The crucifixion begins. Jesus is offered wine mixed with Myrrh, a mild analgesic mixture. He refuses to drink. Simon is ordered to place the patibulum on the ground and Jesus is quickly thrown backward with His shoulders against the wood. The legionnaire feels for the depression at the front of the wrist. He drives a heavy, square, wrought-iron nail through the wrist and deep into the wood. Quickly, he moves to the other side and repeats the action, being careful not to pull the arms too tightly, but to allow some flexion and movement. The patibulum is then lifted in place at the top of the stipes and the titulus reading "Jesus of Nazareth, King of the Jews" is nailed in place.

The left foot is pressed backward against the right foot, and with both feet extended, toes down, a nail is driven through the arch of each, leaving the knees moderately flexed.

(Continued on Page 647)

Maybe the patient's self-diagnosis is right. He could have hay fever. But that bright red nasal mucosa, along with the thick discharge and excoriation around the nares, strongly suggests that the main problem is a cold. Hay fever or another form of allergic rhinitis may or may not be an underlying factor.

If a complete history and examination rule out allergic rhinitis, the long-term outlook will be a lot more favorable than his own "diagnosis" would have indicated.

But right now, whether he's got allergic rhinitis or a cold, he's suffering from the same irritating symptoms of drip, congestion and stuffiness. Try DIMETAPP EXTENTABS®. They're formulated to relieve these symptoms without much chance of causing drowsiness or overstimulation. Your patients will appreciate the 24-hour relief they can get from just one tablet every 12 hours.

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WARNINGS *Use in children:* In infants and children, particularly antihistamines in overdosage may produce convulsions and death.
PRECAUTIONS Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
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Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

(III) Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

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(Continued from Page 644)

The Victim is now crucified. As He slowly sags down with more weight on the nails in the wrists, excruciating, fiery pain shoots along the fingers and up the arms to explode in the brain—the nails in the wrists are putting pressure on the median nerves. As He pushes Himself upward to avoid this stretching torment, He places His full weight on the nail through His feet. Again there is the searing agony of the nail tearing through the nerves between the metatarsal bones of the feet.

At this point, another phenomenon occurs. As the arms fatigue, great waves of cramps sweep over the muscles, knotting them in deep, relentless, throbbing pain. With these cramps comes the inability to push Himself upward. Hanging by His arms, the pectoral muscles are paralyzed and the intercostal muscles are unable to act. Air can be drawn into the lungs, but cannot be exhaled. Jesus fights to raise Himself in order to get even one short breath. Finally, carbon dioxide builds up in the lungs and in the blood stream and the cramps partially subside. Spasmodically, He is able to push Himself upward to exhale and bring in the life-giving oxygen. It was undoubtedly during these periods that He uttered the seven short sentences which are recorded:

The first, looking down at the Roman soldiers throwing dice for His seamless garment, "Father forgive them for they know not what they do."

The second, to the penitent thief, "Today thou shalt be with me in Paradise."

The third, looking down at the terrified, grief stricken, adolescent John, (the beloved Apostle), he said, "Behold thy mother," and looking to Mary, his mother, "Woman, behold thy son."

The fourth cry is from the beginning of the 22nd Psalm, "My God, my God, why hast thou forsaken me?"

Hours of this limitless pain, cycles of twisting, joint-rending cramps, intermittent partial asphyxiation, searing pain as tissue is torn from His lacerated back as He moves up and down against the rough timber: Then another agony begins. A deep crushing pain deep in the chest as the pericardium slowly fills with serum and begins to compress the heart.

Let us remember again the 22nd Psalm (the 14th verse), "I am poured out like water, and all my bones are out of joint: my heart is like wax; it is melted in the midst of my bowels."

It is now almost over—the loss of tissue fluids has reached a critical level—the compressed heart is struggling to pump heavy, thick, sluggish blood into the tissues—the tortured lungs are making a frantic effort to gasp in small gulps of air. The markedly dehydrated tissues send their flood of stimuli to the brain.

Jesus gasps His fifth cry, "I thirst."

Let us remember another verse from the prophetic 22nd Psalm: "My strength is dried up like a potsherd; and my tongue cleaveth to my jaws; and thou hast brought me into the dust of death."

A sponge soaked in Posca, the cheap, sour wine which is the staple drink of the Roman legionnaires, is lifted to His lips. He apparently doesn't take any of the liquid. The body of Jesus is now in extremis, and He can feel the chill of death creeping through His tissues. This realization brings out His sixth words—possibly little more than a tortured whisper.

"It is finished."

His mission of atonement has been completed. Finally He can allow his body to die.

With one last surge of strength, He once again presses His torn feet against the nail, straightens His legs, takes a deeper breath, and utters His seventh and last cry, "Father, into thy hands I commit my spirit."

(Continued on Page 652)

around the state

Vital Statistics

NEW MEMBERS

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Crowder, Jackson Garrett, b 34, mc Georgia 61, recip. Georgia 1973, 1101 3rd Avenue, West Point, Georgia 31833. GP.

Mullins, Ross Bob, Jr., b 42, mc Alabama 68, sb 69, 704 Avenue C, West Point, Georgia 31833. GP.

Colbert County

Welborn, William Ralph, Jr., b 42, mc Vanderbilt 67, recip. Tennessee 73, 505 North Columbia Avenue, Sheffield, Alabama 35660. D.

DeKalb County

Elliott, Johnny Cleveland, b 37, mc Alabama 64, recip. NBME 1968, P. O. Box 87, Henager, Alabama 35978. GP.

Escambia County

Whittle, William Herman, b 36, mc Alabama 72, recip. NBME 73, 1321 McMillan Avenue, Brewton, Alabama 36426. GP., S.

Lee County

Dempsey, Richard Lee, b 36, mc Emory 63, recip. Georgia 72, 121 North 20th Street, Opelika, Alabama 35801. S.

Macon County

Eagleson, Hodge MacIlvain, Jr., b 24, mc Univ. of Pittsburg 47, recip. Ohio 70, 309 West Southside Street, Tuskegee, Alabama 36083. Physical Medicine & Rehabilitation.

Thompson, Daniel Joseph, b 19, mc Meharry 46, recip. Tennessee 52, 2100 Ethel Drive, Tuskegee Institute, Alabama 36088. Administrative.

Marion County

Weathers, Bobby Wayne, b 41, mc Alabama 72, recip. NBME 73, Box 689, Winfield, Alabama 35594. GP.

Montgomery County

Bridger, William Michael, b 42, mc Arkansas 67, recip. Arkansas 71, 2119 East South Blvd., Montgomery, Alabama 36111. Path.

Hager, Roy Thomas, b 42, mc Alabama 67, sb 68, 750 Washington Avenue, Montgomery, Alabama 36104. Oph.

Payne, Gillis Lavelle, Jr., b 41, mc Alabama 68, recip. NBME 69, 2900 McGehee Road, Montgomery, Alabama 36111. Pd.

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(Continued on Page 651)

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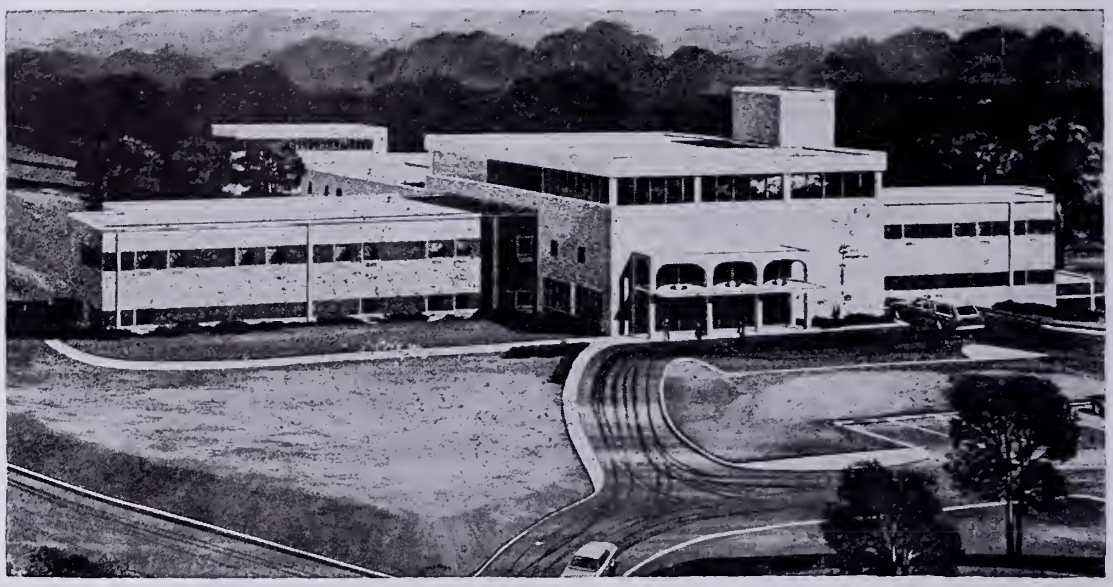

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(Continued from Page 648)

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Sox, Joe H., Montgomery to P. O. Box 1356, Andalusia, Alabama 36420.

(Continued from Page 647)

The rest you know. In order that the Sabbath not be profaned, the Jews asked that the condemned men be dispatched and removed from the crosses. The common method of ending a crucifixion was by crurifracture, the breaking of the bones of the legs. This prevented the victim from pushing himself upward; the tension could not be relieved from the muscles of the chest, and rapid suffocation occurred. The legs of the two thieves were broken, but when they came to Jesus they saw that this was unnecessary.

Apparently to make doubly sure of death, the legionnaire drove his lance through the fifth interspace between the ribs, upward through the pericardium and into the heart. The 34th verse of the 19th chapter of the Gospel according to St. John: "And immediately there came out blood and water." Thus there was an escape of watery fluid from the sac surrounding the heart and blood from the interior of the heart. We, therefore, have rather conclusive post-mortem evidence that Our Lord died, not the usual crucifixion death by suffocation, but of heart failure due to shock and constriction of the heart by fluid in the pericardium.

Thus we have seen a glimpse of the epitome of evil which man can exhibit toward man—and toward God. This is not a pretty sight and is apt to leave us despondent and depressed. How grateful we can be that we have a sequel: A glimpse of the infinite mercy of God toward man—the miracle of the atonement and the expectation of Easter morning!

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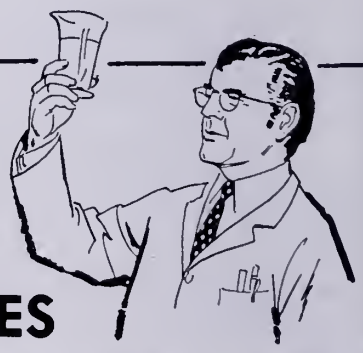

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PRESIDENT'S PAGE

J. GARBER GALBRAITH, M.D. PRESIDENT

A New Year Begins

The Medical Association now begins a new year of operation after a very successful annual meeting in Huntsville. I am deeply appreciative of the honor of being elected to serve as President of MASA. Also I am keenly mindful of the many responsibilities of this office, the effective execution of which will require the team work of all members of MASA. To this end I solicit your suggestions and recommendations, and especially your willingness to work for the Association.

Matters of most urgent concern to all of us now are the questions of national health insurance, health manpower (numbers and distribution) and governmental support of new systems of delivery of health care (HMO). The Congress will undoubtedly take action in these matters during the current session, and it is hoped that input from the AMA will be helpful in guiding these programs. Already on the books is a new law which is of direct and immediate concern to all of us.

Public Law 92-603 (PSRO) has far-reaching implications for the future patterns of medical practice. It behooves all of us to inform ourselves of this Act and its provisions. Despite protestations by many state medical societies to the contrary, this is the law of the land. Compliance by 1976 is mandatory, and if this is not satisfactorily implemented at the local level, the Federal authorities are empowered to impose a program of their design. The AMA and others are making all efforts to repeal or amend this law, but at present there appears little chance of success for these efforts. It is therefore essential that we strive to make the implementation of this law something that we can live with in the every day care of our patients.

Fortunately, MASA with the cooperation of the Alabama Hospital Association was successful in having our state designated as a single PSRO area. This gives us the opportunity to work together to develop the program under medical direction rather than one formulated by lay persons or bureaucrats. The Interspecialty Council of MASA is developing criteria and standards for the various medical specialty fields to be used in the program of audit and review of health care services. The participation of all specialties in this endeavor is essential if we are to avoid unduly restrictive regulations imposed at the federal level. The best interest of the patient must be the yardstick by which we measure all criteria. While cost control is a legitimate concern, it must not be the prime consideration. Properly designed, the PSRO program should have the potential to insure the quality of health care as its main objective.

Alabama Medical Review, Inc. has applied for the area PSRO management contract for Alabama. All physicians in the area, regardless of membership in any medical society, are invited and, in fact, are urged to join this organization. In this way, all may have a voice in the formulation and operation of PSRO in Alabama. Some have voiced objection to this view, stating that it is better to have nothing to do with such a program and leave its implementation en-

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WOMAN'S AUXILIARY

EVELYN O'BRIEN, PRESIDENT

Cable TV—It's Potential Use

As I begin my year as President of the State Auxiliary I am surprised by the confidence I feel. I don't have to "get the ball rolling" because the Auxiliary has a momentum given it by those very effective ladies who preceded me that I don't think I could stop if I tried. However, the national headquarters of our Medical Auxiliary doesn't believe in being satisfied and has some new ideas for us to put to work on a state and county level. The committees which will be given a special emphasis for 1974-1975 are AMA-ERF, Legislation, Health Education, Community Health, Family Health, International Health, Membership and Communications. They have developed an effective program in each of these fields and we are now at work trying to apply these programs to Alabama's needs. I will describe these developments in further columns.

One of the highlights of this past year as President-Elect was the very educational workshop held last fall in Birmingham. This was sponsored by the state women's auxiliary and mainly the result of the work of Mrs. Lewis Young, our state Health Education Chairman. One of the speakers there was Dr. Aaron Stern who has spoken in Birmingham before at the Birmingham Academy of Medicine. His speech to the Women's Auxiliary was so helpful to me that I obtained tapes of other talks he made in Birmingham. One tape in particular discussed a topic that is important to us all.

Dr. Stern is certified in the psychoanalytical branch of Psychiatry. Beside his M. D. he has a Ph. D. in child development. He is chairman of the psychoanalytic clinics at Columbia and Princeton University. For several years he has been Director of the Code and Rating Administration of the Motion Picture Association of America. He also has been an educational consultant to the United Nations, to several school systems and to groups interested in developing the best avenues for the growth of the TV Cable.

He spoke on this subject about a year ago to a group of civic leaders in Birmingham warning them that the growth of this medium of communication may revolutionalize personal life. He foresees that a small body of men will be able to control the ideas seen by hundreds of communities. Within a few years forty to a hundred channels will be available to us in the home. Since concept formation is directly related to perception, the more sense you use the more the cognitive development. As a result of Sesame Street kindergarten teachers have had to raise the level of teaching and national groups are presently working on more elaborate audio-visual concepts for higher grades to enhance learning. The cable system TV will be used to entertain, educate, deliver mail, medical data, be used as a burglar alarm system, give local merchants a chance to demonstrate their wares and take orders (by two way reporting). A chan-

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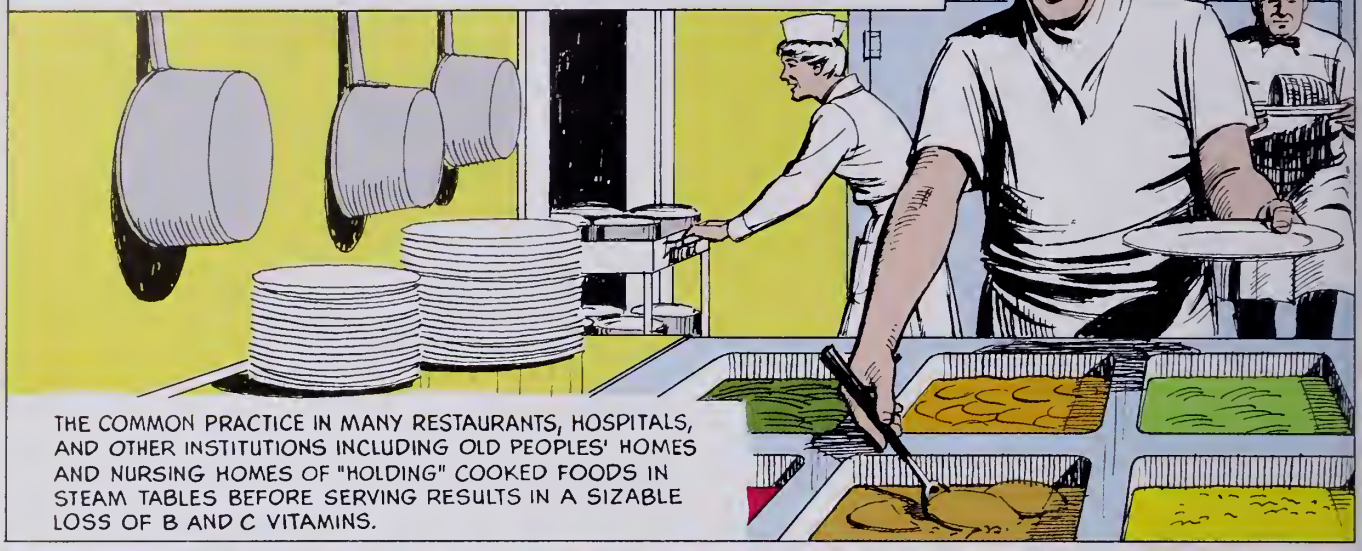

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Heart Disease Remains As Nation's Leading Killer

Cardiovascular disease continues to be the leading cause of death in the U. S. despite massive efforts in cardiology.

Probably the most significant development in preventive cardiology during the year was the implementation of the National High Blood Pressure Education Program (NHBPEP)—a campaign that is beginning to have impact across the country.

Hypertension, or high blood pressure, is a medical condition afflicting about 23 million people, causing 25,000 deaths and many of the more than one million heart attacks and strokes that Americans suffer each year.

Coordinated by the National Heart and Lung Institute (NHLI), the national program serves primarily as a catalyst in disseminating information, and leans heavily on the initiative of individual physicians and medical organizations as well as hospitals, medical centers, phamaceutical and industrial firms, and community groups. Also, the American Heart Association made hypertension its first priority for the three-year period 1973-76, and summoned its chapters and affiliates to provide resources for a far-reaching campaign.

Last year's campaign effort took the form of high blood pressure awareness programs, screening efforts, television exposure, and more published books and articles.

Advances in cardiovascular research and technology include: (1) the development of a technique for the dispersal of rabbit lung into individual viable cells; (2) evidence that clinical trials of the porcine valve prosthesis is further warranted; (3) a new nuclear scanning technique that identifies the damaged area of the heart in coronary patients; (4) the mass implantation of nuclear cardiac pacemakers; (5) the development of new diagnostic tools, such as recent clinical applications of echocardiography and cineangiography; (6) evidence that carbon monoxide from cigarettes and automobiles imperils those with coronary heart disease; (7) the use of extract from puffer roe, tetrodotoxin (TTX) to reduce open heart surgery risks; and (8) the discovery of a safer drug for congestive hearts.

Technology is now at hand to relate the structure and function of the lung at the cellular level. Investigators have reported a method for the enzymatic dispersal of rabbit lung into individual viable cells that are morphologically intact, consume oxygen, and exclude a vital dye.

This new model for the study of lung metabolism provides the opportunity for isolation and separation of individual cell populations from whole lung tissue. Once techniques are developed to culture single cell types, the specialized requirements for cell growth may be examined and ultimately a comparison made of cells grown from normal individuals with those taken from people with specific abnormalities.

Further research in this area should provide an informational base that will facilitate investigations into the molecular basis of lung disease, an essential step to effective prevention and treatment.

Recent scientific evidence supports the validity of continuing clinical trials of the porcine valve prostheses because of their excellent functioning, their relative freedom from clotting problems, and the low mortality rate attendant to their use.

Between July 1970 and March 1973, a study of 145 patients who received the prosthesis indicated only four operative and six late deaths. Extensive postoperative studies of 46 patients tested six months to a year after receiving their implants revealed excellent valve function in all but one case (a child whose implanted valve had been damaged by a heart infection). Only two episodes of embolism occurred.

With a new nuclear scanning technique developed by the dean of the University of Texas Southwestern Medical School, physi-

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(Continued from Page 660)

nel which could only be purchased by medical personnel could provide continuing education for its members.

This technology belongs to all of us and we should have some influence to censor, control and regulate ideas that come into the home. It is of great importance to us that it be used to optimally enhance life in our community. There are powerful forces in our world, new ones are constantly being developed but these have no direction other than that which man gives them. The technology we now have has such potential that our margin for error is decreasing. We must use this means of communication to educate intellectually but even more importantly reach effectively that which is emotional and irrational in all of us.

(Continued from Page 659)

tirely to the federal authorities. In my view, this would be most unfortunate as it would deprive us of any opportunity for input into the formulation and policy of the program.

It is safe to state that with the imposition of this program, which begins with audit of hospital health care services, the practice of medicine as we have known it will be permanently altered. It is imperative that the changes must not interfere with the physician - patient relationship, so essential to effective medical care. If you have not yet sent in your card for membership in Alabama Medical Review, Inc., please do so today. If you have not received a card or lost yours, please contact Alabama Medical Review, Inc., 19 South Jackson Street, Montgomery, Alabama 36104 for a duplicate application card.

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(Continued from Page 663)

cians are able to see the exact area of damage caused by coronary heart attack. A radioactive substance with an affinity for calcium is injected into the patient and within an hour the damaged area of the heart has collected enough calcium tagged with radioactivity to be readily identifiable on the screen of the scintillation scanner.

The cardiac pacemaker, a miniature machine that controls the heart rate by sending out regular electrical impulses, has meant new life for some 70,000 U. S. cardiac patients. But it also has meant a biennial trip to the hospital for surgery, since its battery must be changed about every two years.

However, this recurrent surgery may become a thing of the past for some coronary disease patients because of the recently developed nuclear-power pacemaker. About 190 such devices, designed to operate for ten years, were implanted during the past year.

Echocardiography, a diagnostic, noninvasive technique that provides ultrasonic visualization of the cardiac structures, received substantial attention during the year. This technique is being used increasingly to detect congenital malformations, visualize the basic anatomy and function of the intact heart, detect inflammations of the pericardum, and evaluate narrowing of the aorta.

At the University of California, San Diego, School of Medicine, a group of investigators have reported on the successful use of a phased multiple crystal ultrasound system for studying and diagnosing cyanotic congenital heart disease.

Across the country, at the University of Rochester Medical Center, an extensive scanning procedure is used to view the left ventricle or the entire heart, to detect mitral stenosis quickly and accurately, and to identify atrial myxomas and assess pulmonary hypertension.

Refinements in instrumentation for angiography include the development of an angiogram analyzer. Used with a computer in the cardiovascular laboratory, this instrument can calculate ventricular volumes and extrapolate values such as stroke volume and ejection fractions.

Manufacturers of x-ray film are steadily upgrading their products. They continue to develop faster film emulsions with better grain size to improve the contrast. Many labs are now finding that reducing film speed by half, to 30 frames per second, gives a good cineangiogram with less radiation hazard to the patient and lower film costs.

In two double-blind studies completed last year, it was determined that angia patients should avoid heavy atmospheric pollution and smoking. Evidence produced by these studies reveals that 50 parts per million of carbon monoxide breathed over two to four hours can significantly shorten the patients' exercise tolerance.

The 50 ppm figure approximates the average CO level in Los Angeles freeway air last year. As for smoking, health officials estimate that inhalers get about 475 ppm per cigarette.

Investigators in Hershey, Pa., believe they have found a substance, namely tetrodotoxin (TTX), that will reduce open-heart surgery risks. An extract from puffer roe, TTX is a direct cardiac depressant. After aortal clamping, hearts treated with TTX came to a total standstill in five to ten seconds, whereas untreated hearts required five to eight minutes. Even more important, say the investigators, is the fact that TTX enables the surgeon to start the heartbeat again faster and easier.

Heart rate, rhythm, and contractile force of the treated hearts returned to normal within five minutes of unclamping. In the untreated hearts, standstill periods of 30 to 45 minutes caused erratic rhythms, weak contractions, and slow beats.

Clinical trials are underway for a new drug that appears to be a safer agonist for congestive hearts. A dopamine analogue called dobutamine seems to stimulate the cardiac output of patients in heart failure and yet not cause either arrhythmias or undesired peripheral vessel side effects.

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Other telephone suppliers in town? You bet. A types. And if you're approached by one who wants to sell you a phone system, listen to what he has t say. He'll probably tell you he can give you "more" for "less." But listen carefully. Make sure he doesn leave anything out.

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If you don't know what questions to ask, give us a call; we can help you com up with a complete list of questions. After all, we've been in the business almost hundred years, and our experience has taught us where most of the pitfalls lie—where "less" might turn out to be "more." It could save you from an expensive oversight. No question about that.

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CONTINUING MEDICAL EDUCATION

Larry Dixon

The following questions have been provided by the American College of Physician's "Medical Knowledge Self-Assessment Program".

DIRECTIONS: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the **one** that is BEST in each case.

1. Metabolic alkalosis and hypokalemia occur after ingestion of
   a. large quantities of cough syrup containing glycyrrhiza fluid extract
   b. paraldehyde
   c. ethylene glycol
   d. large quantities of bromides
   e. large quantities of aluminum hydroxide

2. A 14-year-old girl presented with a two-year history of repeated episodes of urinary tract infection refractory to vigorous long-term antimicrobial therapy. On one or two occasions she recalled left flank pain and fever. When asymptomatic, bladder emptying was normal. Multiple quantitative urine cultures revealed Escherichia coli in counts of greater than 10^6 organisms. An excretory urogram disclosed bilateral ureteropyelectasis and caliceal clubbing.

   Which of the following additional measures would be of diagnostic value?
   a. Determination of creatinine clearance
   b. Bilateral retrograde pyelograms
   c. Voiding cystourethrography
   d. Renal biopsy
   e. Renal arteriogram

3. An 18-year-old boy developed renal colic. A plain roentgenogram of the abdomen revealed a small calculus in the region of the left renal pelvis. Urinalysis showed erythrocytes and hexagonal crystals typical of cystine. Which of the following is the most likely diagnosis?
   a. Cystinosis
   b. Fanconi syndrome
   c. Cystinuria
   d. Renal tubular acidosis
   e. Sponge kidney

4. In a patient with primary aldosteronism and hypertension, response to surgery usually may be predicted by a therapeutic trial with
   a. Chlorothiazide (Diuril) and supplemental potassium
   b. triamterene (Dyrenium)
   c. spironolactone (Aldactone-A)
   d. guanethidine sulfate (Ismelin)
   e. a low-sodium diet

5. The "myeloma kidney" (widespread dense proteinaceous casts in the renal tubules surrounded by foreign body giant cells with associated renal insufficiency) occurs.
   a. almost exclusively in patients with Bence Jones proteinuria
   b. commonly in patients with macroglobulinemia as well as in patients with multiple myeloma
   c. only when there is marked high concentration of Bence Jones protein in the plasma
   d. almost exclusively in patients with a monoclonal spike in their plasma but not in their urine
   e. in none of the above

6. A 40-year-old man whose blood pressure is 170/110 mm Hg has hyperaldosteronuria. After three days of high-sodium in-

take and treatment with fluorocortisone acetate (Florinef), 1.0 mg/day, there is no significant change in his aldosterone excretion.

Which of the following would best support a diagnosis of primary aldosteronism?

a. determination of adrenal venous renin activity (upright position, low-sodium intake)

b. Differential renal functions studies

c. determination of serum total CO_2 content

d. determination of peripheral venous renin activity (upright position, low-sodium intake)

e. Nephrotomogram with vascular phase films

7. With regard to the use of sodium bicarbonate in acute salicylate intoxication, which of the following statements is correct?

a. Sodium bicarbonate is contraindicated because of the danger of excessive sodium retention.

b. Sodium bicarbonate is contraindicated because many patients are already alkalotic.

c. Alkalinization of the plasma suppresses salicylate excretion.

d. Alkalinization of the urine increases the rate of salicylate excretion.

e. Administration of a sodium salt increases filtration of salicylate and is thus responsible for increased salicylate excretion.

8. A patient who had acute renal failure is found on postmortem examination to have widespread blockage of the renal tubular system with uric acid crystals. Which of the following is most consistent with this pathologic finding?

a. The patient's long-standing gout was treated with large doses of allopurinol (Zyloprim)

b. The patient's long-standing gout was treated with colchicine and uricosuric agents for the first time

c. The patient has a lymphoma of the mediastinum and was given radiation therapy

d. The patient had acute leukemia that went into remission under treatment with methotrexate (Amethopterin). During and after treatment the urine was maintained at pH 7.5 by use of acetazolamide (Diamox) and sodium bicarbonate.

e. The patient had multiple myeloma. After treatment with urethan, there was marked diminution of bone pain

9. A 23-year-old woman with slowly progressive renal failure develops intense pruritus that becomes worse when chronic maintenance hemodialysis is instituted. Which of the following would most likely relieve the itching?

a. Antihistamines

b. Topical corticosteroid ointment

c. Aspirin

d. Parathyroidectomy

e. Bilateral nephrectomy

10. A 34-year-old woman is found to have a blood pressure of 190/132 mm Hg. At the time of her last physical examination, one year ago, her blood pressure was 120/70 mm Hg. The most significant evidence suggesting that she has renovascular hypertension is

a. a negative family history of hypertension

b. a continuous, high-pitched right upper quadrant bruit transmitted to the right flank

c. a history of treatment of urinary tract infection during each of her two pregnancies

d. moderate narrowing and focal stenosis of the retinal arterioles without significant sclerosis

e. proven recent onset of severe hypertension

(Answers on Page 701)

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INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows.

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Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or t women who may become pregnant is contraindicated in view of the teratogenic effec of the drug in rats.

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Meclizine HCl is contraindicated in individuals who have shown a previou hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug patients should be warned of this possibility and cautioned against driving a car c operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in childre have not been done; therefore, usage is not recommended in the pediatric age grou

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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The Physician Assistant: One Solution To The Health Care Crisis

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EDITOR'S NOTE: *The opinions expressed here reflect that of the authors. They do not reflect those of the editorial review board of this journal.*

INTRODUCTORY ABSTRACT

Today's health care delivery system is geared to sickness—not to health with few incentives to prevent illness or to diagnose illness in the early stages. There also is an overall shortage and maldistribution of physicians, not only in Alabama but throughout the United States in general. As a result of these and other problems, health care consumers, in general, are complaining of unsatisfactory health care delivery service.

Task analyses performed on physicians' activities have revealed that many of the tasks now reserved for the physician do not require his long educational background and unique talents; and, furthermore, can be delegated successfully to individuals with less medical training without significantly increasing the risk of adversely effecting the patient's health or comfort. Within the past decade, such individuals when properly educated, supervised and utilized with legal authorization, have become known as physician assistants and their impact on the health care system has been positive.

THE PROBLEM

The public is complaining that medical care is expensive; its quality grossly uneven; its availability sometimes unattainable; and the patient's interests not being served. More specifically, the consumer patient has identified the following problems: difficulty in getting physician appointments; extensive waiting periods in offices beyond appointment time; paying high fees for a relatively short contact period with the physician; unavailability of night and week-end care; insufficient followup care after an initial treatment or operation; and inadequate counseling about their specific disease, to name a few.[1,2,3,4]

According to Dr. John Knowles, President of the Rockefeller Foundation, 40 million people in the United States are not getting health care.[1] These people have a high rate of death and disability, yet medical care is inaccessible. This problem is augmented by the appalling lack of and/or fragmented health service in the inner cities and rural areas.

The causes of today's "health care crisis" are frequent topics for discussion and documentation. The more outstanding causes include population explosion and biomedical knowledge explosion. The former resulted from increased birth rates, longer life spans, and the introduction of Medicare and Medicaid policies, making health care possible for indigent peoples in a system unprepared to receive its new clients. These causes have been compounded by a deficiency in the numbers of professional and allied profes-

sional health workers. Although provision of health care is the nation's third largest industry, it numbers only 4-½ million persons.[5]

In terms of optimum health care, one must take a general look at our health care system. This system is geared to sickness—not to health. In most cases, patients come in moments of distress. Under these circumstances, the incentives have been to care for the sick with few incentives to prevent illness, or to diagnose illnesses in their early stages. Because so little attention is paid to preventing disease and treating it early, too many people get sick and need intensive treatment—which is expensive.[4]

In today's system of health care delivery, there is a shortage of physicians, an inefficient use of physicians in the area of primary health care, and finally, a geographical maldistribution of physician services. Many physicians have congregated in the cities and suburbs, thus decreasing the number of physicians available to the rural population. Furthermore, of the 345,000 physicians, 34,200 have withdrawn from clinical practice into fulltime educational, research, administrative, and political positions.[5]

The total number of physicians involved in specialty practice is increasing in relation to the population ratio of those providing primary care, e. g., general practitioner, pediatrician, obstetrician and gynecologists. There was a decline of 6 per cent noted in the latter population from 1966 to 1970 bringing the total percentage of primary health care practitioners to 59 per cent.[5]

The country as a whole reflects a physician/patient ratio of 160:100,000 in the more affluent states and 87:100,000 in the less affluent states. These figures are less than the minimal number of physicians the American Medical Association notes as actually needed.[5]

A POSSIBLE SOLUTION TO THE HEALTH CARE CRISIS

An increase in the number of physicians in this country is one resolution now being implemented. Medical schools have increased their total enrollment and training facilities; however, the output will be insufficient to provide personal health services to the population now being cared for while extending care to that population now receiving little or no care. Regarding the latter population, medical schools are still concerned with the continual problem of low numbers of graduates migrating to rural practice. Furthermore, in the event that sufficient expansion of physician output could rise to meet the needs of the population, it is doubtful whether this would be appropriate since many of the tasks currently performed by the physician do not actually require his long educational background and unique talents.[6]

A solution, therefore, has been devised to make the existing physician services, especially in the area of primary health care, available to greater numbers of people. Emphasis was placed on the primary care practitioner's needs rather than the specialist's as the specialist on the average sees 25 per cent fewer patients than do the primary care practitioners.[5]

Task analyses performed on physicians' activities revealed that many of their duties could be delegated successfully to a person with less medical training without significantly increasing the risk of adversely affecting either the patient's health or comfort. Consequently, the concept of a physician assistant became a reality.[7]

It would seem that the most logical source of manpower to whom to turn for an immediate extension of physician services would be nursing. This, in fact, was proposed; however, the nursing profession resisted the concept of the physician assistant. When the American Medical Association attempted to promote the concept of nurse-physician assistant, the American Nursing Association rejected this proposal. Nursing did not want to deplete its already insufficient ranks to fill another health service category, nor did it want to lose its identity as an independent health worker.[8] Conse-

quently, a population of adults with health care experience was identified as potential candidates for physician assistant training.

THE PHYSICIAN ASSISTANT

Since 1965 a variety of "physician assistant" training programs have evolved in this country. The title "physician assistant" offered some confusion to the health profession and public, because, historically, anyone who helped a physician was classified as his "assistant". Physician assistant training programs have recognized the predictable problem with this appellation; however, the name was retained by most schools since it was self explanatory. It was hoped that, in time, with formalized education and national standards, the physician assistant nomenclature would gain recognition and respect.

In order to avoid confusion about the generic term "physician assistant" in this paper, the term will refer to a health professional, qualified by academic and clinical training, who performs tasks ordinarily reserved for a physician and who works under the direction, supervision, and responsibility of a qualified licensed physician to extend the physician's capabilities in the diagnostic and therapeutic management of patients.

To date, there are 108 programs training physician assistants.[9] The emergence of this variety of specially trained individuals referred to by various titles, but commonly as physician assistant (P. A.), requires some clarification as they also vary in educational requirements, and roles. In general, the P. A. population may be divided into three basic types as follows:

1. P. A. GENERALIST (Type A)*

   This assistant contacts the patient ahead of the physician, performs the history and physical examination, orders routine baseline studies as indicated, then integrates and synthesizes the data so that it can be presented to the physician. The assistant may function in many settings, hospital, office, clinic, nursing home, etc. where the responsible physician may shift his observation from over-the-shoulder, to on-the-premises, to other forms of communication depending on the circumstances and patient condition. The P. A. may initiate treatment and administer patient care including minor suturing, casting, wound debridement, patient teaching and counseling. This P. A. is distinguished by his ability to integrate and interpret findings on the basis of general medical knowledge and exercise a degree of independent judgment.

* The Board of Medicine of the National Academy of Sciences has classified physician assistants according to the degree of specialization and level of judgment by dividing the groups into A, B, and C categories.[8]

The prerequisites for entry into a training program generally include a minimum of two years college-level education and two years of health experience. The length of training programs may range from 18-30 months.

2. P. A. SPECIALIST (Type B)

   In general, this assistant does not possess the breadth of knowledge required of the P. A. generalist though he, too, functions like the generalist in performing histories, physical examinations, etc. Because his knowledge and skills are limited to a particular specialty, the overall independent actions are less than that of a P. A. generalist. He also functions under the supervision of a physician to whom he is responsible for his activities. The prerequisites for program entry are similar to that of the P. A. generalist; however, the training is more specific. Consequently, the P. A. specialist's functions lie within a health specialty area, e. g., surgery, diabetes, orthopedics, urology. Training is completed within 12-24 months.

3. P. A. PRECEPTORSHIP (Type C)

This assistant, referred to as MEDEX, may function over a broad range of activities but generally, his responsibilities are limited to delegated tasks frequently listed on protocols. He has less formal training than either of the previous categories. The length of training extends over a 12-15 month period with approximately 80 per cent of education time occurring in the physician-employer preceptor's office. Though similar to the P. A. generalist in the number of areas in which he can perform, this P. A. requires more physician supervision and cannot exercise the degree of independent synthesis and judgment unique to the P. A. generalist. College education is not held as a prerequisite for entry into this training program. Emphasis instead, is placed on extensive background in military "on the job" training as medical corpsmen. (See Table 1.)

The P. A. generalist will be discussed in this paper since he offers the broadest range of skills and, therefore, a substantial extension of the primary care physician in today's health care system.

TRAINING PROGRAMS FOR P. A.s

There are currently 33 programs training assistants to the primary care physician. The programs are designed to prepare career-minded individuals to effectively assist a physician in his medical activities. A P. A's training begins prior to entering the formal training program. Each student is required to have at least 2000 hours of patient care experiences before matriculation. In general, this experience covers approximately a two-year period and is acquired in military settings and civilian settings, including such backgrounds as military corpsmen, laboratory and x-ray technologists, nurses, surgical and medical care technicians, respiratory therapists, and coronary care unit technicians. A curriculum providing a broad education foundation in medicine as well as a variety of technical skills enables the graduates to perform in various medical settings—the hospital (wards, operating room, emergency room), clinic, office, home, and nursing home.[11, 12]

The American Medical Association conducts three activities to achieve a consistant standard of quality care by physician assistants. These activities include: 1) evaluation of the need for physician assistants,

TABLE I:

CLASSIFICATION OF P. A. TRAINING PROGRAMS

TITLE	PROGRAM PREREQUISITES	LENGTH OF TRAINING	GRADUATE DOCUMENTATION
P. A. Generalist	1. 2 yrs. college level education 2. 2 yrs. health experience	18-30 months	Certificate or Bachelor of Science Degree*
P. A. Specialist	1. 2 yrs. college level education 2. ± prior health experience	12-24 months	Certificate or Bachelor of Science Degree*
MEDEX	1. High school graduate 2. Substantial medical corpsman experience	12-15 months	Certificate

2) accreditation of the training programs, and 3) cooperation with the National Board of Medical Examiners in developing a national program of certification for assistants to the primary care practitioner.

In 1971 the American Medical Association Council on Medical Education developed a set of guidelines regarding the criteria necessary for the establishment and maintenance of appropriate quality for P. A. educational training programs. Upon request from the school, the A. M. A. site teams review each program to determine if they are preparing assistants to the primary care physician according to the "Essentials of an Approved Educational Program for the Assistant to the Primary Care Physician."[12] To date, 32 P. A. programs have been granted A. M. A. approval, among which is the P. A. Program at the University of Alabama in Birmingham.

Further standardization and evaluation concerning the P. A. has been created in the form of a national certifying examination for assistants to the primary care physician. The examination was prepared by the National Board of Medical Examiners to aid in evaluating, standardizing, and maintaining high standards within this new profession. The examination will also serve to provide the potential employer with evidence of competency, to enhance the career and geographic mobility of the P. A. by providing credentials that are nationally recognized. The first administration of the examination took place December 12, 1973.[13]

LIABILITY

There has been much concern as to the malpractice aspect of this new health profession. The assistant himself is liable for his own acts, and the physician-employer is also liable under the doctrine of *respondeat superior*. This is no departure from past legislation as physicians have always been responsible for the negligent acts of their employees.[8, 14]

It has been suggested, however, that if one uses a P. A. to perform tasks within his own bounds of limitation under appropriate physician supervision, malpractice risks should be reduced by two different means: (1) by allowing the physician to concentrate on those medical procedures and judgments that only he can manage and, (2) by improving patient rapport. Time motion studies have shown that, when a P. A. is used, waiting periods are reduced and patients receive greater attention. This is important as malpractice suits often result from poor patient rapport rather than negligence per se.[8]

The potential additional exposure to liability is less related to the manner in which the P. A. will function than to the simple fact that the P. A. will necessarily come into contact with more of the physician's patients. The *quid pro quo* for this additional exposure would be both greater income and greater productivity on the part of the employing physician. No significant or unique malpractice liability therefore, would be imposed upon a physician who employs a P. A. nor would there be a greater liability imposed upon the P. A. himself. It would appear, then, that alleged concerns that P. A.s are not being effectively integrated into the health care system because of malpractice problems are without real foundation. More substantial concern in the widespread acceptance of the P. A. concept would seem to relate more to 1) the attitudes of physicians, 2) matters pertaining to the training and credentialing of P. A.s, 3) economic concerns of the medical and nursing professions, and 4) other non-medical legal issues.[14, 15]

Malpractice insurance coverage is available to both the university trained P. A. and his physician-employer at relatively reasonable rates. The P. A. seeking his own coverage is generally charged a premium equal to one-half the premium charged his employer—an amount which varies according to the medical specialty involved. The physician is charged a nominal additional premium to cover his P. A. which is roughly comparable to the cost of covering an office nurse.[15]

LEGALITY

P. A.s carrying out their delegated re-

sponsibilities conflict with the existing Medical Practice Acts in many states. Since June 30, 1973, approximately 34 states enacted a form of P. A. legislation in order to assure a legal framework for these assistants.[10]

There are two classes of legislation that now exist. The first form provides an exception to the State Medical Practice act that codifies the physician's legal right to delegate routine patient-care functions to a qualified nonphysician. The second class is more comprehensive. This law identifies a regulatory body, usually the State Board of Medical Examiners, who sets forth the educational standards of training and task guidelines for the Physician Assistant.[16, 17] (See Table 2)

TABLE 2

EXISTING

LEGISLATION REGARDING P. A.s

1. **Exception to the State's Medical Practice Act:**

   Alaska, Arizona, Arkansas, Colorado, Connecticut, Deleware, Georgia, Hawaii, Idaho, Kansas, New Jersey, North Carolina, Oklahoma, Maryland, Utah, Virginia*, and Florida*.

2. **Legislation enacted to authorize the State Board of Medical Examiners to approve training programs and establish guidelines for their utilization:**

   Alabama, California, Florida, Iowa, Michigan, Nebraska, Nevada, New Mexico, New York, Oklahoma, Oregon, South Dakota, Vermont, Washington, West Virginia, and Wyoming.

3. **Legislative proposals are or were pending in 1972:**

   Illinois, Indiana, Kentucky, Minnesota, Ohio, Pennsylvania, Tennessee, and Wisconsin.

*Both delegatory and regulatory statute.

*Bachelor of Science degrees are conferred in some programs, and optional in others pending completion of degree requirements.

UNIVERSITY OF ALABAMA PHYSICIAN ASSISTANT GENERALIST PROGRAM

An incentive for initiating a P. A. Program at the University of Alabama in Birmingham was the health care delivery problems in the state. One example is the current patient-physician ratio of 1286:1 in Alabama. Furthermore, on a county by county basis, there is an even more critical shortage as seen by Coosa County's 10,662 population that is totally without medical care.[18, 19] Accordingly, in 1970, a P. A. Generalist Program was started in an attempt to train assistants in the areas of primary health care for Alabama and the Southeastern United States.

MD - Physician
PA - Physician Assistant Generalist
MX - MEDEX
DA - Physician Assistant in Diabetes

Figure 1: PA and MD. Distribution in Alabama

To date, the program has graduated 31 students, all of which are currently employed in the health field. Approximately one-half of the graduates found employment in individual physician practices and one-half in health care institutions.

A graduate follow-up study was conducted early in 1973 by the Alabama P. A. Program. Of the seven 1972 graduates, only six were included in the study as one graduate accepted an administrative position on the P. A. Program faculty. The findings of the study revealed that 100 per cent of the six P. A. graduates performed in hospitals (wards and operating rooms), clinics, and physician offices. On the average, each worked between 70-90 hours per week. Patient and personnel acceptance of the P. A. in all settings was found to be good. The impact of the P. A. on the practice showed an increase of 0-15 per cent in three practices; 20-25 per cent in two practices; and 60 per cent in one practice setting. Overall, the major portion of P. A. time was being spent in performing the following activities: eliciting complete histories and physical examinations; writing doctor's orders (counter-signature necessary), and discharge summaries; assisting in the management of acute and chronic patient disorders; first assisting in surgery; screening laboratory, x-ray and electrocardiogram tests; performing routine office procedures and specialized tests; rounding on hospitalized patients; and teaching and counseling patients.

It is of some interest to note that the P. A.s of different categories, as previously described, have already been employed in Alabama. Specifically, there are twelve P. A. Generalists, nine Surgeon Assistants, three Diabetic Assistants, and nine MEDEX. The distribution of these personnel in the state is seen in Figure 1. Figure 2 reflects the distribution of the 31 Alabama P. A. Generalist graduates on a nationwide basis.

UTILIZATION OF ASSISTANTS

It is suggested that prior to employing a P. A. within a medical practice or health

Figure 2: National Distribution of the 30 U.A.B. P.A. Generalist Graduates *

*one P.A. graduate in Guatemala

care institution that the following guidelines be observed:

1. Policies should be developed by the physician or institution employing the assistant concerning:
   a. the scope of practice which the assistant will assume, e. g., gathering and recording data, writing orders for tests and treatments, use in the emergency room.
   b. amount and type of supervision required by the responsible physician or his designee in his absence and delegation of responsibility to the assistant.
   c. methods of assessing the P. A.'s credentials and ability.
   d. requirements for the continuing education of the P. A.
   e. liability protection.
   f. employment benefits, e. g., fringe benefits, insurance coverage, and hours provided for the assistant.
   g. a system for continuing review and evaluation of the above issues.
2. The medical community and consumer population should be educated concerning the P. A. concept and the role of this health practitioner in the physician's practice.
3. Application should be made to the state regulatory body by the physician and his assistant to become registered in the state.

In conclusion, there is no easy solution for the current problems apparent in this country's health care system. This paper has presented one credible solution in the form of a new health care practitioner - the Physician Assistant.

References

1. Kacen, A.: A Social Viewpoint of the Physician's Assistant Movement: Part I. Physician's Associate, 2:83-88, 1972.

2. Zweifeler, A. J. and Corey L.: Physician Manpower and the Health Care Team: Medicine in a Changing Society, C. V. Mosby Company, St. Louis, pp. 117-127, 1972.

3. Anderson, R., Kravits, J. Anderson, O. W.: The Public's View of the Crisis in Medical Care - An Impetus for Changing Delivery Systems? Economic and Business Bulletin, 24:44-52, 1971.

4. Stephens, G. G.: The Horse and Buggy Doctor—1980 Style. Medical Insight, 5:12, September, 1973.

5. Building a National Health-Care System: Committee for Economic Development, A Statement by the Research and Policy Committee, pp. 30-34, April, 1973.

6. Rousselot, L. M., Beard, S. E., Berry, B. H.: The Evolution of the Physician's Assistant: Brownian Movement or Coordinated Progress. Bull. N. Y. Academy of Medicine, 47:1473-1500, 1971.

7. Lave, J. R., Lave, L. B., Morton, T. E.: The Physician's Assistant, J. A. H. A., 45:42-50, 1971.

8. Sadler, A. M., Sadler, B. L., Bliss, A. A.: The Physician's Assistant Today and Tomorrow, Yale University Press, New Haven, pp. 69, 23-25, 81-82, 1972.

9. Middleton, J.: Would You Believe 108 Kinds of "Physician's Assistants"!. Medical Economics, 28:130, 1971.

10. Employment & Use of Physician Assistants. A Guide for Physicians, Department of Health Manpower, Division of Medical Practice, American Medical Association, November, 1973.

11. Braun, J. A., Howard, D. R., and Pondy, L.: The Physician's Associate: A Task Analysis. Abstract, Physician's Associate, 2:78, 1972.

12. Educational Programs for the Physician's Assistant: A. M. A. Division of Medical Education, Department of Allied Professions and Services, p. 2, February, 1973.

13. Hubbard, J. P.: Physician Assistant Exam is Readied. Medical World News, 14:72, 1973.

14. The Physician Assistant, Roundtable Discussion. Patient Care, 7:104-146, 1973.

15. Bernzweig, E. P.: The Malpractice Problems and the Use of Physician's Assistants. Department of Health, Education and Welfare, Secretary's Commission of Medical Malpractice, December, 1972.

16. Derbyshire, R. C.: Physician's Assistants: Legal Problems, Certification, Licensure. Medical Opinion, 2:48, 1973.

17. Winston, J., Dean, J. D.: State Legislation for Physician's Assistants: A Review and Analysis. Health Service Reports, 88:1, 3.

18. Alabama Comprehensive Health Planning Agency: Physicians Licensed and Residing in Alabama, legal sheet, October 14, 1972.

19. Birmingham News, newspaper article, March 9, 1973.

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Woman (man) cannot.

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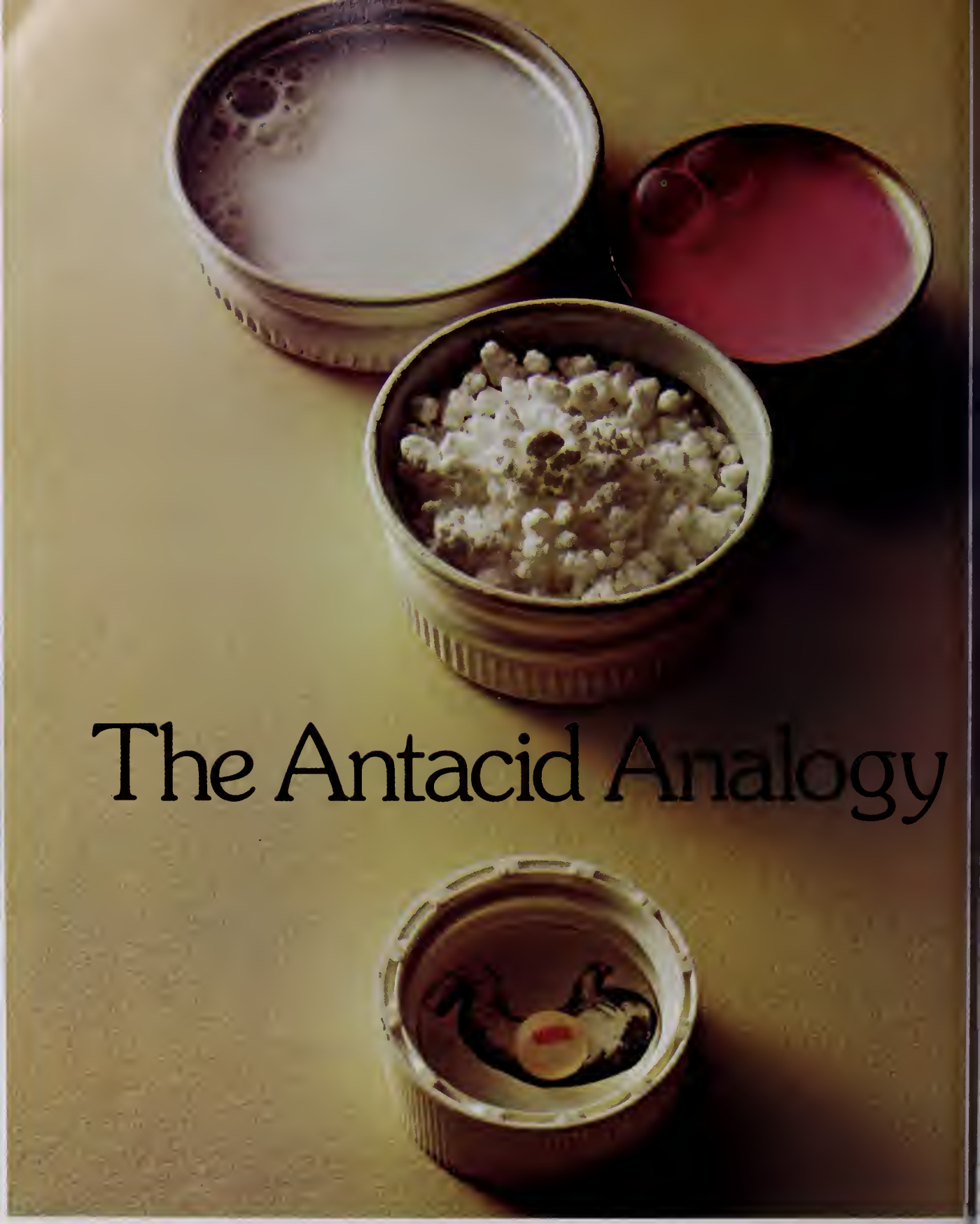
Restores what the body cannot effectively store



Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflux esophagitis, or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution.

Fever and possibly heat stroke may occur due to anhidrosis.

In theory a curare-like action may occur, with loss of voluntary muscle control. For such patients prompt and continuing artificial respira should be applied until the drug effect has been exhausted.

Diarrhea in an ileostomy patient may indicate obstruction, and possibility should be considered before administering Pro-Banthine.

Precautions: Since varying degrees of urinary hesitancy may be evider by elderly males with prostatic hypertrophy, such patients shoulc advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcer colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions

Therapeutic comparisons in peptic ulcer.

ntacids have only one mode of action to relieve ulcer pain...

Pro-Banthine® has four.

nd of
ropantheline bromide

ntacids:
tacids relieve ulcer pain by neutralizing gastric d. This action is relatively short-lived and they have other mode of action.

o-Banthine:
o-Banthine suppresses gastric acid cretion. The antisecretory properties of o-Banthine are well established. By effectively cking vagotonic impulses Pro-Banthine suppresses tric secretion to reduce both total and free acid.

o-Banthine helps relieve pain.
-Banthine relieves ulcer pain by reducing gastric retion and the motility and spasm of the trointestinal tract.

Pro-Banthine reduces acidity without subsequent acid rebound. The capacity of Pro-Banthine to reduce the secretion of total and free acid in the stomach has been demonstrated in scores of studies. None has demonstrated any significant evidence of acid rebound.

Pro-Banthine activity lasts about six hours. The effect of a single therapeutic dose (15 mg.) of Pro-Banthine lasts about six hours.* Pro-Banthine P.A.®, the prolonged-acting form, is active from 8 to 12 hours. Thus Pro-Banthine may be used to suppress acid, spasm, and pain around the clock, even during the sleeping hours when antacids, to be effective, must be taken almost hourly.

*Innes, I. R., and Nickerson, M., in Goodman, L. S., and Gilman, A. (editors): The Pharmacological Basis of Therapeutics, ed. 4, New York, The Macmillan Company, 1970, p. 537.

Pro-Banthine complements and enhances the action of antacids.

SEARLE **Searle & Co.**
San Juan, Puerto Rico 00936

Address medical inquiries to: G. D. Searle & Co.
Medical Department, Box 5110, Chicago, Ill. 60680

r as well as mydriasis and blurred vision. In addition the following rse reactions have been reported: nervousness, drowsiness, dizziness, mnia, headache, loss of the sense of taste, nausea, vomiting, constipa- impotence and allergic dermatitis.

age and Administration: The recommended daily dosage for adult therapy is one 15-mg. tablet with meals and two at bedtime. Subse- nt adjustment to the patient's requirements and tolerance must be e.

Banthine P.A.—Each tablet of Pro-Banthine P.A. (propantheline nide) contains 30 mg. of the drug in the form of sustained-release or timed-release beads; on ingestion about half of the drug is released within an hour and the remainder continuously as earlier increments are metabolized. Thus the result is even, high-level anticholinergic activity maintained all day and all night in most patients with only two tablets daily. Some patients may require one tablet every eight hours.

The contraindications and precautions applicable to Pro-Banthine 15 mg. should be observed.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

Synthroid®

(sodium levothyroxine)

Supplied: **Tablets:** 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded in bottles of 100, 500, and 1000.

Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, U.S.P., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent.

Synthroid-T_4

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DIVISION OF TRAVENOL LABORATORIES, INC.
Deerfield, Illinois 60015

MEDICO - LEGAL DIALOG

The Health Maintenance Organization Act Of 1973

John T. Mooresmith
General Counsel, MASA

The Health Maintenance Organization Act of 1973 (Public Law 93-222), signed by President Nixon on December 29, 1973, is the first major piece of health legislation enacted by the Ninety-third Congress. The new measure commits the Federal Government to a limited, trial period support of the development of health maintenance organizations (HMO's). Its stated purpose is to stimulate interest by consumers and providers in the HMO concept and to make health care delivery under this form available and accessible in the health care market.

As an alternative to existing fee-for-service medical care, HMO's bring together a comprehensive range of medical or health care services in a single organization. These services are provided, as needed, to their subscribers in return for a fixed monthly or annual payment periodically determined and paid in advance. This concept is not new, however, some prototypes having been in existence since 1929. Some examples are the Roos-Loos Medical Clinic in Los Angeles (1929), the Kaiser Foundation health plan in Oakland, California (1942), the Group Health Association in Washington, D. C. (1937), the Group Health Cooperative of Puget Sound (1947), and the Health Insurance Plan of Greater New York (1947). As of 1972, about seven million people were enrolled in such plans.

(Continued on Page 688)

FISCAL YEAR
(In Millions Of Dollars)

	1974	1975	1976	1977	1978	TOTAL
Grants and Contracts for Feasibility Surveys, Planning and Initial Development	25	55	85			165
Grants and Contracts for Initial Development				85		85
Loans for Initial Operating Costs	75 Million Revolving Fund*					75
Research and Evaluation Studies of Quality Assurance	14	8	9	9	10	50
TOTAL	54	78	109	109	25	375

**The $75 million loan fund has been divided evenly among the five years for purposes of the totals. However, because the fund is revolving, the total amount of the loans for the five years will probably far exceed the $75 million. The $75 million aggregate is authorized to be appropriated in fiscal years 1974 and 1975.*

UAB Research Team Conducts Study On Heart Surgery

How do physicians determine whether surgery is necessary or helpful to chest pain victims?

In many cases heart catheterization—measurement of pressure and analysis of blood flow in the heart, and injection of dye into the heart—is necessary.

A team of physicians at the University of Alabama in Birmingham Medical Center is conducting research to find ways to eliminate the need for such catheterization in some cases.

Some people suffer severe chest pains because of obstructed arteries, which often necessitate surgery for correction. Others, however, have pain related to other types of heart disease, or totally unassociated with heart disease. These patients can be rehabilitated with medicine, and perhaps psychiatric counseling.

Dr. David H. Jackson, assistant professor of medicine at UAB, said a majority of patients with coronary disease show an abnormality of the heart or metabolism when their heart rate is increased by electronic pacing, but that this reaction, in itself, does not indicate the need for surgery.

"Some patients with normal heart arteries also have abnormal heart function and metabolism under stress of increased heart rate. Surgery would not be considered in his group," Dr. Jackson added.

"We feel that many patients can be rehabilitated medically (without surgery), and this is one thing our research is designed to do—distinguish between those patients who have arterial blockage, and those who have some other type of heart disease, or none at all," he added.

At Your Service in The Heart of Dixie
(Also called the Yellowhammer State)

In the state* named after the Indian people who once lived here, the *Alibamu* . . .

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MARION LABORATORIES, INC.
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These men bring you . . .

"Not all patients with chest pain have obstructed arteries. At the present time, that fact must often be evaluated by catheterization with a coronary arteriogram, a means of filling the arteries with contrasting material (dye) to determine presence or absence of an obstruction," Dr. Jackson explained.

Dr. Jackson said the team of physicians examine each day's arteriograms to determine which are normal. If they are normal, and there is no other type of heart disease, the patient's physician is contacted for approval to ask the patient to assist in the research effort.

The patient is told what is involved in the program, and transferred to the UAB's special Clinical Research Unit, where psychiatric testing, exercise testing and other examinations are conducted during hospitalization.

"Many heart patients have a psychological hang-up about heart problems," Dr. Jackson said. "Many of them think they have serious heart disorders, but in reality they have minimal abnormalities of the heart, or none at all.

"We try to provide all the encouragement and counseling we can, and with the proper medication these patients can enjoy healthier, more productive lives," he added.

The research effort is being funded by the Social Rehabilitation Service of the U. S. Department of Health, Education, and Welfare (HEW), and the National Institutes of Health (NIH). The program involves no expense to the patients, according to Dr. Jackson.

Puts comfort in your prescription for nicotinic acid

THE OPTIMAL-DOSE, 400-mg, timed-release NICO-400® (nicotinic acid) capsule provides • Controlled flushing for the desired effects without therapy-limiting side effects. • Convenient b.i.d. dosage that's less likely to be forgotten. • The economy of nicotinic acid medication.

For comfort wherever nicotinic acid is used

NICO-400®

(nicotinic acid) Plateau CAPS®

Description: Each capsule contains 400 mg of nicotinic acid in a special base that provides a prolonged systemic effect. ***Indications:*** NICO-400® is recommended for all disease states in which nicotinic acid has been used. These include conditions associated with deficient circulation and for use in the correction of nicotinic acid deficiencies. ***Contraindications:*** Individuals with a hypersensitivity to nicotinic acid, severe hypotension or hemorrhaging. ***Warnings.*** Use with caution in those patients with history of peptic ulcer, severe diabetes, impaired gall bladder or liver functions and in pregnant women. ***Adverse Reactions:*** Patients should be informed of the short-lived reactions experienced with nicotinic acid therapy: cutaneous flushing, a sensation of warmth, tingling and itching of the skin, increased gastrointestinal motility and sebaceous gland activity. ***Dosage and Administration:*** One capsule every 12 hours or as directed by physician. ***Caution:*** Federal law prohibits dispensing without prescription. ***How Supplied:*** Bottles of 100 capsules.

Another patient benefit product from MARION PHARMACEUTICAL DIVISION MARION LABORATORIES INC KANSAS CITY, MISSOURI 64137

(Continued from Page 685)

To aid the development of HMO's, the act authorized a total appropriation of $375 million over a five year period. Grants and contracts for public or nonprofit private organizations are authorized for: (1) surveys or other activities to determine the feasibility of developing and operating or expanding the operation of an HMO, (2) planning projects to establish HMO's or to expand the membership of an HMO or the area that it serves, and (3) projects to initially develop HMO's. Also, for public or nonprofit private HMO's, loans to meet initial operating costs in excess of revenues during the first 36 months of their operation are authorized under the law. Priority for grants and contracts for feasibility and planning studies will be given to applicants who can assure that the HMO at the time it first becomes operational will draw at least 30 per cent of its members from medically underserved populations.

Funding under the act is phased in such a way as to allow natural elimination of the assistance program at the end of five years. The authorization grants and contract funds for feasibility surveys, planning or initial development is: $25 million in fiscal year 1974, $55 million in fiscal year 1975, and $85 million in fiscal year 1976. In addition, $85 million is authorized for initial development grants and contracts in fiscal year 1977.

In order for federal assistance to be granted, however, the HMO's must meet the definitional and organizational requirements of the act.

DEFINITIONAL REQUIREMENTS:

Health maintenance organizations are defined as entities which provide basic health services to their enrollees, and, for an additional payment, supplemental health services. Prepaid enrollment fees for the basic and supplemental health services must be fixed uniformly under a community rating system, without regard to the medical history of any individual or family.

The HMO must offer no less than the minimum benefits package or, in the terms of the act, the "basic health services" to any of its members. The minimum benefits package includes physicians' services (including consultant and referral services), inpatient and outpatient hospital services, medically necessary emergency health services, short term (not to exceed 20 visits) ambulatory evaluative and crisis intervention mental health services, medical treatment and referral services for alcohol and drug abuse or addiction, diagnostic laboratory and diagnostic and therapeutic radiologic services, home health services, and preventive health services (including voluntary family planning services, infertility services, preventive dental care for children, and children's eye examinations). Preventive dental services for children (under 12) include, as a minimum, oral prophylaxis, topical fluoride application, and surface sealant services. The HMO must also provide health education and medical social services for its members.

In addition to the minimum benefits package, the HMO is required to offer the following "supplemental health services" to its membership on an optional basis, insofar as the health manpower necessary to provide the services is available in the area served by the HMO: intermediate and long-term care facilities' services, vision care not included in the minimum benefits package, dental services not included in the minimum benefits package, mental health services not included in the minimum benefits package, long-term physical medicine and rehabilitative services (including physical therapy), and prescription drugs prescribed in the course of rendering basic or supplemental health services.

The HMO must make services available and accessible on a 24 hour a day basis for medical emergencies. In addition, if basic health services or supplemental health services are provided to an HMO member outside of the HMO, and if it is medically necessary that the services be provided before the

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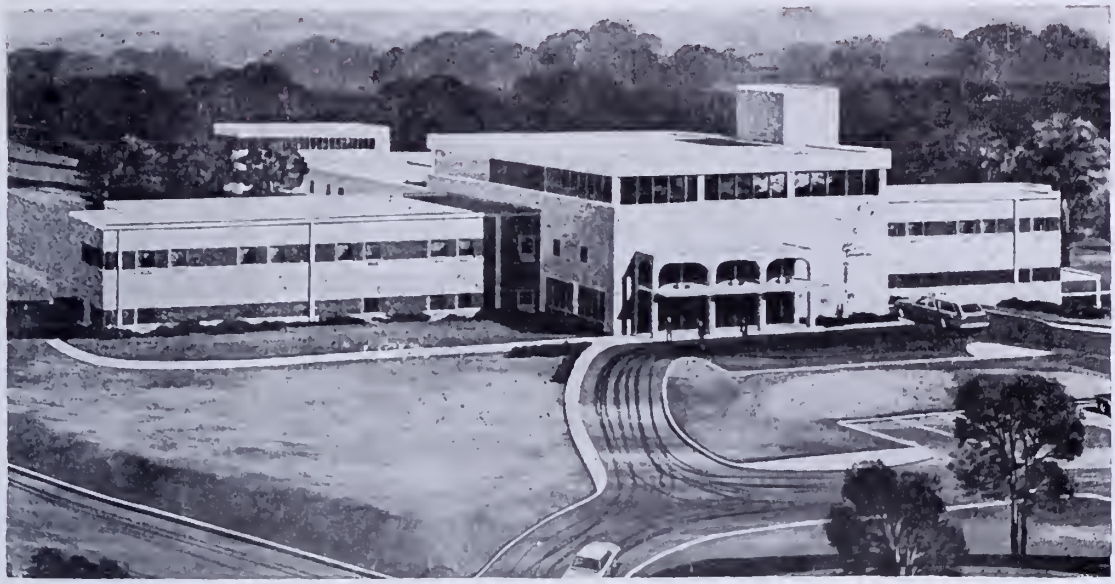


Hill Crest HOSPITAL

For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospital, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

PSYCHIATRISTS:

James K. Ward, M. D.
F. Joseph Nuckols, M. D.
James A. Greene, M. D.
Charles W. Moorefield, M. D.
Otto F. Eisenhardt, M. D.

ADMINISTRATOR:

Robert V. Sanders

HILL CREST HOSPITAL

Hill Crest Foundation, Inc.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: 205-836-7201

(Continued from Page 688)

member could secure them through his HMO, the HMO must pay for the services.

ORGANIZATIONAL REQUIREMENTS:

The HMO must provide "basic health services" through health professionals who are members of the HMO's staff, medical groups, or individual practice associations. Exceptions to this requirement are allowed for unsual or infrequently used services (defined in conformity with regulations to be established by the Secretary) and emergency and out-of-area services.

A medical group is defined as a partnership, association, or other group which is composed of licensed doctors of medicine or osteopathy, as well as other licensed health professionals, such as dentists, optometrists, and podiatrists. The majority of the members of the group, however, must be licensed to practice medicine or osteopathy. In addition, the members of the medical group must pool their income from practice as members of the group and distribute it among themselves in accordance with a prearranged formula. They must share medical records along with physical and personnel resources. They must also utilize allied health professionals, in accordance with regulations to be established by the Secretary of HEW, to the extent to which they are available and to the extent to which their use is appropriate for "the effective and efficient" delivery of health care services. The group must also arrange for and encourage continuing education in the field of clinical medicine and related fields for its members. Finally, the members of the group, and the group itself, must have as their "principal professional activity" the provision of professional services to an HMO.

The act defines individual practice associations as partnerships, corporations, associations or other legal entities, which have entered into services arrangements with individuals licensed to practice medicine, osteopathy, dentistry, podiatry, optometry, or other health professions. As with the case of a medical group, however, the majority of the providers in an individual practice association must be licensed to practice medicine or osteopathy. Furthermore, the individuals under contract to the individual practice association must provide professional services in accordance with a compensation arrangement established by the entity. As with medical groups, practitioners must, to the extent feasible, utilize allied health professionals as they are available and as appropriate for the "effective and efficient" delivery of health care services to HMO members, share medical records along with physical and personnel resources, and make arrangements to encourage continuing education in the field of clinical medicine and related areas.

The act specifically overrides any state laws or regulations which would prevent or inhibit HMO development.

The passage and signing into law of the Health Maintenance Organization Act of 1973 is only the first step, albeit a major one, in an implementation process. The funds authorized under the act still must be appropriated by Congress, obligated for expenditure, and spent by the Administration. In addition, the Secretary of HEW has the major task of developing administrative regulations to implement the act. While some of these regulations will be procedural rather than substantive, others will be crucial to the course of HMO development.

PHYSICIAN WANTED—Immediate opening for GP wanting to relocate in southern coastal city. 40 hours per week, no nights or week-ends. Federal civilian salary with excellent benefits. Equal Opportunity Employer. Contact U. S. Public Health Service Outpatient Clinic, Savannah, Georgia, 912-232-4321, Ext. 306.

Advances in Cancer Research Announced by NCI

The National Cancer Institute (NCI) estimates 51 million Americans living today will develop some form of cancer and two-thirds of them or 34 million will die from this disease. In fact, one of every six deaths in the United States is due to cancer.

During 1973, 79,000 new cases of lung cancer were diagnosed. Some 72,000 died of lung cancer. Ranking second on the cancer mortality scale, colon and rectal cancer took 47,000 lives; 23,000 women died of breast cancer.

A major accomplishment in the second year of the national cancer program, the first such coordinated effort organized by any nation against a specific disease, was the delivery of research results to the American people.

The Cancer Control Program of NCI intensified its efforts to apply recent research findings to the prevention, diagnosis, treatment, and rehabilitation of patients who have all forms of cancer. Twelve comprehensive cancer centers, the forerunners of a national network, engage in the whole range of cancer biomedical research and assist other medical institutions in their regions to improve their control programs.

Also during the past year, the NCI joined forces with the American Cancer Society to demonstrate new detection techniques for breast cancer; collaborated with HEW's National Clearinghouse for Smoking and Health in an effort to reduce the number of cancers that have been linked to smoking; and instituted efforts to develop model rehabilitation services which can be replicated throughout the country to help effectively treated cancer patients return to a normal life.

Among the major advances in cancer research were:

1. The first evidence that some forms of advanced non-Hodgkins lymphoma can be controlled for long periods.
2. Immunological findings that strengthen the association between relatively common herpes simplex viruses and nine forms of human cancer.
3. Development of a national program to maintain current information on cancer incidence, cancer deaths, and the number of cancer patients, how they are being treated, and the results of treatment.
4. A preliminary but promising approach to immunotherapy for acute leukemia patients.
5. New evidence of virus information in human leukemia cells which may lead to improvements in understanding, diagnosing, and treating the disease.
6. Creation of the first artificial gene with potential for life function.

The first major indication that patients with some non-Hodgkins lymphomas can achieve extended disease-free survival without continued treatment was reported by NCI scientists. Eighty previously untreated patients with various types of advanced non-Hodgkins lymphomas were given a six-month course of drug treatment using one of three basic drug combination treatments. Of the study group, 45 per cent achieved complete remissions, with more than half of the patients' remissions lasting one to seven years.

A research team, headed by Albert Sabin, of polio vaccine fame, have identified the ordinary herpes simplex viruses—one of the sources of man's most common viral infections—as etiologically linked to nine human cancers and ruled out as factors in 20 others. The cancers in which HSV has been implicated are lip, mouth, oropharynx, nasopharynx, kidney, bladder, prostate, cervix, and vulva.

The sites of noninvolvement are the gum, tongue, tonsil, salivary gland, accessory sinus, epiglottis, ovary, testis, liver, thyroid, uterus, lung and bronchus, stomach, colon, and breast.

(Continued Next Page)

A number of investigators have demonstrated that antiserums produced in heterologous animals by the injection of leukemia cells detect antigens associated with leukemia. In recently reported studies, antiserums were raised by injecting rabbits with cell membrane components from a lymphoid tissue culture cell line taken from a patient with Burkitt lymphoma.

Clinical studies demonstrate that this antigen appears at the time of the acute phase of the disease and disappears from the cell surfaces as the patients are induced into remission with chemotherapy. Also, substances blocking the reactivity of this antisera have been found in the serums of patients with the acute phase of their disease.

The ability to detect leukemia-associated antigens may have applicability in clinical diagnosis and treatment. The demonstration that this particular antigen(s) disappeared with the treatment and corresponded with the morphologic criteria of remission may prove of value in following therapeutic approaches to this disease. For example, using serologic reactivity of peripheral cells from patients undergoing chemotherapy, this technique could predict when chemotherapy should be reinstituted. If such a test proves to be predictive of relapse, earlier institution of chemotherapy may result in less morbidity and longer remission of the disease.

During 1973, reports by NCI scientists and others revealed the presence of rather incomplete virus information in some human breast cancers and leukemia. During the same year, many virologists began to reexamine the basic nature of the RNA type C virus, questioning whether RNA viruses of cancer-causing potential occur in latent form in every individual at conception or whether they are introduced by external stimuli later in life.

According to the virus gene theory proposed in 1969, RNA virus genes are present from conception in every living cell as part of the inherited genetic material. This theory

(Continued on Page 701)

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5 4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512

When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

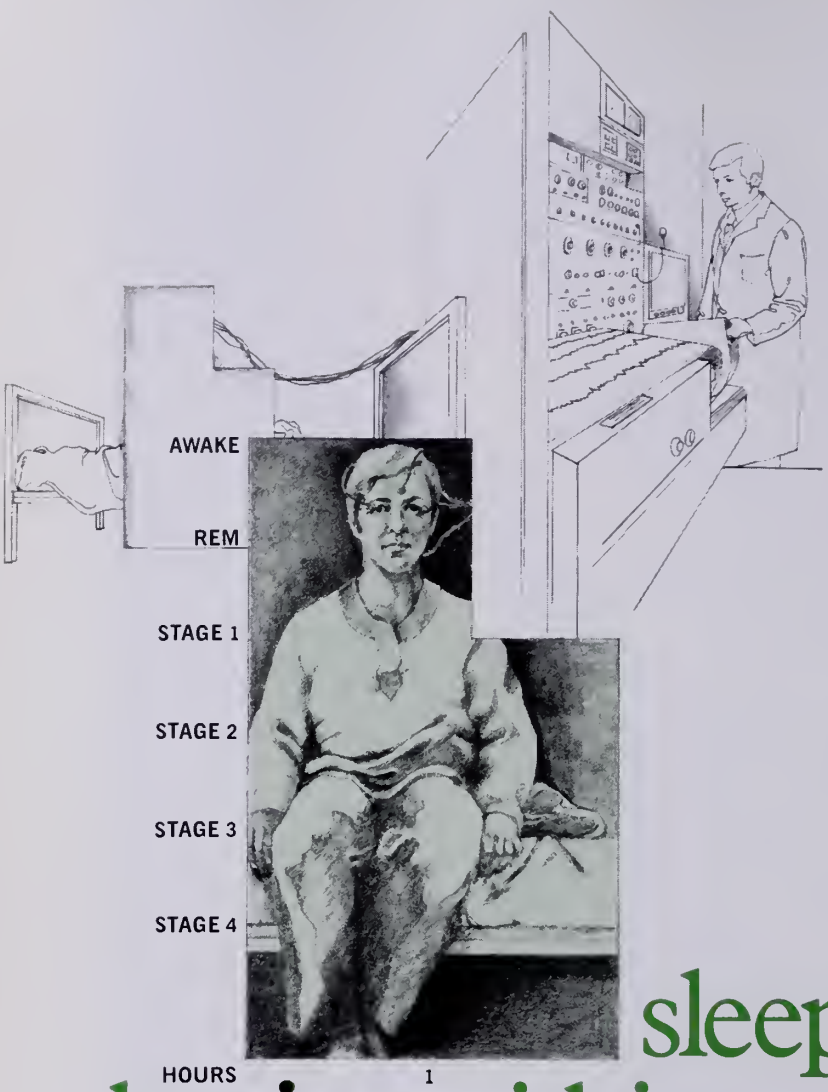
Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

Studies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended.



sleep begins within 17 minutes, on average ...

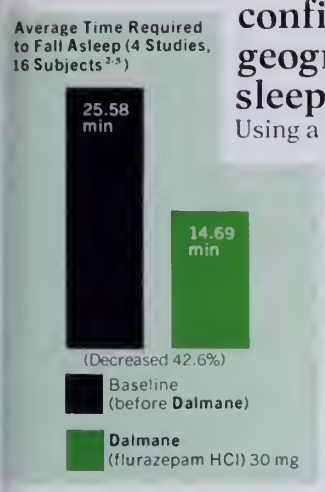
an initial benefit of

Dalmane®

(flurazepam HCl)

proved by a 22-night clinical study of insomnia patients in the sleep research laboratory and at home[1]

Three insomnia patients selected for difficulty falling asleep were administered Dalmane (flurazepam HCl) 30 mg for 14 consecutive nights. Placebo was given for four nights prior to and four nights after Dalmane. Physiologic tracings on Dalmane nights 1-3 showed sleep induction time averaged 13.90 minutes; on Dalmane nights 12-14, 18.80 minutes. Combined average for the 6 monitored drug nights was 16.35 minutes.[1]



confirmed by clinical studies in four geographically separated sleep research laboratories[2-5]

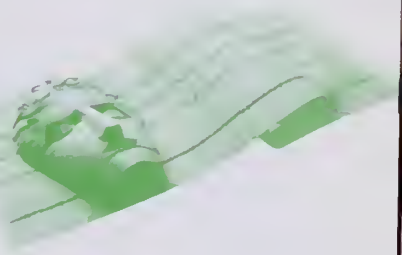
Using a 14-night protocol involving eight insomniac and eight normal subjects, four studies confirmed the sleep-inducing effectiveness of Dalmane (flurazepam HCl) and the reproducibility of this response. On average, one 30-mg capsule induced sleep within 17 minutes. In all these studies, Dalmane induced sleep rapidly, reduced nighttime awakenings, and provided 7 to 8 hours of sleep without repeating dosage[2-5]

Dalmane (flurazepam HCl) induces and maintains sleep, with relative safety

Dalmane is generally well tolerated; morning "hang-over" has been relatively infrequent. While dizziness, drowsiness, lightheadedness and the like have been noted most often, particularly in the elderly and debilitated, physicians should be aware of the possibility of more serious reactions, as noted below.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.
Contraindications: Known hypersensitivity to flurazepam HCl.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.
Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.
Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.
Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



when restful sleep is indicated

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.* — usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.* — initial dosage for elderly or debilitated patients.

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- sustains sleep 7 to 8 hours, on average, without repeating dosage

REFERENCES: 1. Kales A, *et al*: *Arch Gen Psychiatry 23*:226-232, Sep 1970
2. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
3. Frost JD Jr: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
4. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
5. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ

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Nutley, New Jersey 07110

Opinion & Dialogue

Is there a need for a drug compendium?

Government Health Official

Henry E. Simmons, M.D.
Deputy Assistant Secretary for Health
Department of Health, Education and Welfare

A drug compendiu of the type I envisio would fill a definite need for the pract ing physician. Sucl compendium wou give him all th information ne essary for usi a drug intelligently, and it would do so in a clear, concise, convenient, objective and balanced fashion.

What a Compendium Should Contain

I believe the compendium should inform the doctor what a drug will do, when he should use for what type of patient, for how long, in what dose, what benefits his patient is likely to obtain, the risks involved, and cross-reactio with other drugs.

The information would be based on the package insert and have the same legal status. In fac a complete compendium with co plete and current information might even eliminate the necessi

Maker of Medicine

Joseph F. Sadusk, Jr., M.D.
Warner-Lambert Company

A drug compendium, or preferably compendia, should, I believe, be private, not federal, ir sponsorship. They should contair comprehensive listings of drugs available for prescribing. They should be single, legibly printed volumes of reasonable size, updated quarterly or semiannually and completely revised every yea

Function of a Compendium

A compendium should furnish the following information on drugs in the following order: indic tions for use, side effects, advers drug reactions, contraindications drug interactions, drug dosage ar the dosage forms marketed. Drug prices should not be included because they vary so widely and change rapidly.

No compendium should set forth drugs of choice or discuss relative efficacy. Such questions must be left for the practicing ph sician to decide, whether on the basis of the medical literature, hi own clinical experience, advice o colleagues, information supplied by manufacturers, and so on.

Nor should a compendium undertake to educate the doctor c how to use drugs. Rather, it must be a reference source designed p marily to refresh his memory as t drugs he may not use regularly. It

a package insert in many in-
ınces. This would constitute a
bstantial saving for the manu-
:turer.

By a complete compendium,
o not mean a volume of prohibi-
e size. You don't need a book
scribing 25,000 products with
enormous amount of repetition.
ther, drugs should be arranged
class. Mutually applicable infor-
ation would be provided, along
th brief discussions pinpointing
ferences in specific drugs of
at class. Listings would be cross-
dexed in a useful way.

her Available Documents as urces of Information

Existing references such as
)R and the AMA Drug Evaluation
e obviously useful but they are
:omplete. Either they are not
oss-referenced by generic name
d do not group drugs with simi-
characteristics, or they do not
t all the available and legally
arketed drugs. And some of
ose omitted may be very useful.

On the other hand, drugs made by more than one supplier, tetracycline for example, may be fully described a dozen times in the same book.

While perhaps PDR could be rearranged and cross-indexed with generics included, and while the AMA Drug Evaluation might also be modified and expanded, I am not sure that the end result would have all the attributes required for a useful compendium. At the same time, you would run the risk of amassing a voluminous and unwieldy tome.

Should Editorial Comments Accompany the Listings?

Subjective judgments, in my opinion, have no place in a compendium. However, if there is substantial evidence based on a sound body of science concerning relative efficacy of several drugs, certainly that information should be included. The committee of experts compiling and editing a particular section would also have to assess and indicate instances where a meaningful difference between drugs is pertinent.

Sponsorship, Compilation and Editing

Producing a book like this would undoubtedly be difficult and demanding. It would obviously take a great deal of talent and expertise, and would require a varied and experienced group, ranging from writers and editors to highly skilled clinicians and pharmacologists. Style, format and clarity of language would play an important part in determining the usefulness of the book. And it should be updated periodically and completely revised annually.

I have no opinion whether the government or the private sector should sponsor and/or finance the compendium. What is most important is that the compendium be an authoritative, objective and useful source of information for the doctor to have at hand as a ready reference.

---

ould in no way imply control over
e practitioner's prerogatives.

hy Another Compendium?

A practicable, single-volume
ompendium cannot, nor is it
:cessary to, include all drugs on
e market today. From my prac-
:e of internal medicine for some
years, my experience as a con-
ltant, and as a faculty member
four or five medical schools, I
ould estimate that a doctor uses
ly 30 to 35 drugs regularly. The
972 Physicians' Desk Reference,
cidentally, contained about
500 entries.

As to whether there should be
federal compendium, in my opin-
n, as stated earlier, the answer is
isy—there should *not* be one. The
oposal assumes that existing
ompendia are inadequate. We're
ot sure of that at all. Whatever its
perfections, the present drug
formation system in the U.S. is
en, multifaceted, pluralistic and
tensive. Good compendia exist,
well as other ample sources on
ug therapy, ranging from journal
erature through AMA Drug Evalu-
ion to company materials. Not
l physicians may use such
urces as often or as well as they
ould, but that is the fault of the
an, not of the sources.

In any event, rather than produce another book, it makes much more sense to work on improving existing compendia, and perhaps they could, as knowledge advances, include more accumulated clinical data and experience, and more information on drug interactions and adverse reactions.

Implications of a Federal Compendium

Take a hard look at the implications of a federal compendium. It would have the force of law, virtually dictating what drugs to use and how to use them. In effect, it would be a regulatory document with legal or quasi-legal status, posing medical/legal problems similar to those the doctor may now encounter if and when he departs from the provisions of the package insert. A compendium under federal aegis would tend to restrict decisions on drug therapy to one orthodox level—a most dangerous trend for medicine.

New Compendium—A Medical Option

I detect no ground swell of initiative or support whatsoever for a federal compendium—or, for that matter, for a new compendium of any type. A 1969 PMA survey conducted by Opinion Research Corporation found that only 15 per cent of those physicians interviewed felt a new compendium was needed. And a large majority did not favor the involvement of the federal government if one were to be created, preferring instead a nongovernmental consortium.

Even if we come to a time when the medical profession itself opts for a new kind of compendium, it should be handled and financed, ideally, outside both government and industry. Final review and editorial authority could be delegated, say, to specialty bodies and medical societies—but above all, *not* the government.

Surely the health care system in the United States has far more vital matters to consider than the extensive cost and effort that would have to go into the preparation and maintenance of a new, monolithic compendium, and especially one bearing the imprimatur of the federal government.

Opinion & Dialogue

What is your opinion, doctor? We would welcome your comments.

The Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

For relief of low back pain*
(including intervertebral disc)

Bed rest, moist heat, exercise and 'Soma 350' (carisoprodol) can help relax muscle spasm, relieve mild-to-moderate pain, restore range of motion.*

Economically...with only one tablet *q.i.d.*

Measure the results yourself. (Wallace will even send you a complimentary goniometer.)

* **Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indication as follows:

"Possibly" effective: for symptomatic relief in conditions characterized by skeletal muscle spasm and mild to moderate pain.

Final classification of this indication requires further investigation.

Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to carisoprodol or related compounds such as meprobamate, mebutamate, tybamate.

Warnings: *Idiosyncratic Reactions:* Rarely, first dose has been followed by extreme weakness, transient quadriplegia, dizziness, ataxia, temporary vision loss, diplopia, mydriasis, dysarthria, agitation, euphoria, confusion, disorientation. Symptoms usually subside during the next several hours. Supportive and symptomatic therapy, including hospitalization, may be necessary.

Pregnancy and Lactation: Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursin mothers, or women of childbearing potential.

Children Under Five: Drug not recommended.

Potentially Hazardous Tasks: Driving a motor vehicle or operating machinery.

Additive Effects: Possible additive effects between carisoprod alcohol, and other CNS depressants or psychotropic drugs.

Drug Dependence: Use cautiously in addiction-prone patient

Precautions: To avoid excess accumulation, use caution in patients with compromised liver or kidney function.

Adverse Reactions: *Central Nervous System:* Drowsiness, dizziness, vertigo, ataxia, tremor, agitation, irritability, headache, depressive reactions, syncope, insomnia.

Allergic or Idiosyncratic: Usually seen after 1-4 doses in patien not previously exposed, e.g., rash, erythema multiforme, pruritus, eosinophilia, fixed drug eruption with cross reaction to meprobamate. More severe manifestations: asthma, fever, weakness, dizziness, angioneurotic edema, smarting eyes, hypotension, anaphylactoid shock. Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines and in severe cases corticosteroids).

Cardiovascular: Tachycardia, postural hypotension, facial flushing.

Gastrointestinal: Nausea, vomiting, hiccup, epigastric distress.

Hematologic: Leukopenia and pancytopenia (on carisoprodol plus other drugs).

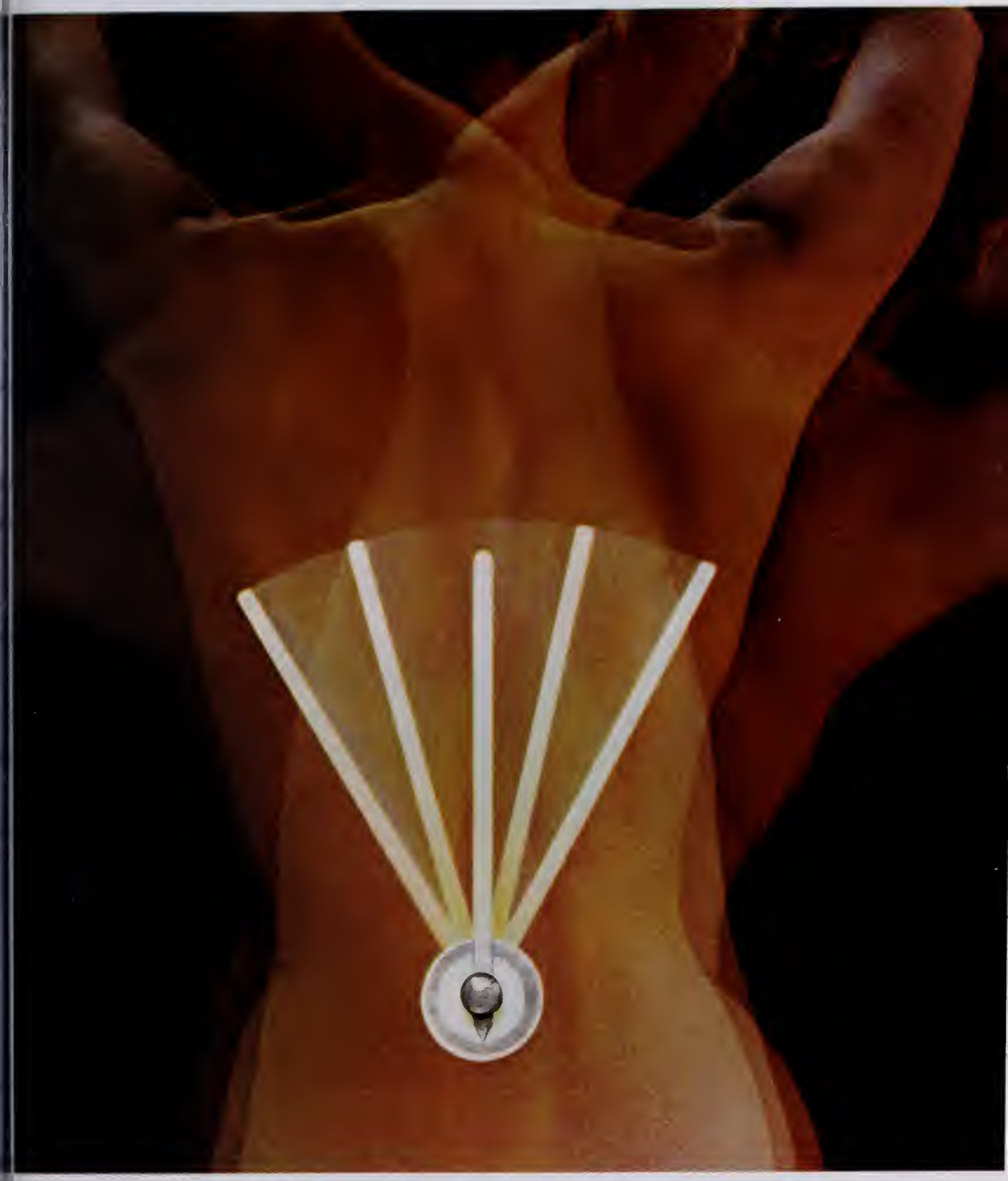
Usual Adult Dosage: One 350 mg tablet three times daily and at bedtime.

Overdosage: Has produced stupor, coma, shock, respiratory depression, and, very rarely, death. Overdosage of carisoprodol plus alcohol or other CNS depressants or psychotropic drugs can be additive. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Carisoprodol is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully with related drug meprobamate. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption.

Before prescribing, consult package circular or latest PDR information. Rev 5/72

WALLACE PHARMACEUTICALS Cranbury, N. J. 08512

Soma® 350 its power may
(carisoprodol) 350 mg tablets



e measured in movement

Integument!

Our skin—the human integument—covers us, defines us, protects us. But skin is subject to cuts, burns, abrasions. And infections. Neosporin Ointment fights infection by providing broad antibacterial action against susceptible skin invaders. It contains antibiotics that are rarely used systemically, reducing the risk of sensitization.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

PRECAUTION: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Complete literature available on request from Professional Services Dept. PML.

NEOSPORIN® Ointment

(POLYMYXIN B-BACITRACIN-NEOMYCIN)

Each gram contains: Aerosporin® brand Polymyxin B Sulfat 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 m (equivalent to 3.5 mg. neomycin base); special white petrolatu q.s. In tubes of 1 oz. and ½ oz. and 1/32 oz. (approx.) foil packet

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

(Continued from Page 692)

purports that genes are activated to produce cancer only in certain individuals as a result of triggering by radiation, chemicals, other viruses, hormones, or other factors.

Conversely, studies conducted at Columbia University of the hereditary chemicals found in white blood cells from two sets of identical twins in which one member of each pair had leukemia suggested that the virus gene theory may not apply to all human cancers. Those twins with leukemia had chemical sequences in their cells related to leukemia causing viruses of animals, but each healthy twin's blood cells were free of these virus related chemical sequences.

Since identical twins are produced by the union of one sperm and one egg, each twin should have the same hereditary chemical characteristics. This was not the case, suggesting that the chemical aberration in the leukemic twin's DNA resulted from factors affecting the cells after conception or after birth rather than from a virus gene present from conception.

The first wholly artificial gene with the potential for functioning inside a living cell was synthesized by Nobel laureate Har Bobind Khorana and associates at the Massachusetts Institute of Technology. The gene is a 125-unit DNA fragment made up of the same chemical components as human animal bacterial nucleic acids. This discovery may constitute a major breakthrough in understanding human genes and the gene abnormalities believed to be associated with cancer.

Another significant advance in experimental immunotherapy was the development of a rabbit antiserum to a mouse cancer, which when injected into cancerous mice not only hones and binds to the tumor tissue but also flags it as "foreign" so that the mouse's host-defense system attacks and destroys the tumor.

This experiment validated that mice given ovarian carcinoma, and then treated with the antiserum were cured and remained disease-free after several months' follow-up. When control animals were injected with the tumor, but not given the antiserum, 90 per cent died.

Venereal Disease Remains Menace

Venereal disease continues to be a major health problem, second only to the common cold.

Gonorrhea, the most frequently reported communicable disease, increased substantially during 1973 (fiscal year), with an incidence rate (reported cases) approximating nearly double that of five years ago.

Some 809,600 cases reported in 1973 represent a 12.7 per cent increase (91,280) over 1972 and the highest incidence ever reported since the Public Health Service established its record-keeping system in the early 1900s.

Although the increase is not as dramatic, more infectious syphilis cases have progressed through the entire infectious stage without being detected. During fiscal year 1973, early latent syphilis cases numbered 22,293 as compared to 20,354 in the preceding year, reflecting a 9.5 per cent increase.

Public health officials are optimistic about the impact of recently expanded gonorrhea casefinding programs for screening large numbers of females in high risk groups. During 1973 (FY), the male-female ratio of reported cases of gonnorrhea was 1.7:1. Two years ago, the gonorrhea male-female ratio was 2.7:1.

ANSWERS TO CONTINUING MEDICAL EDUCATION QUIZ

From Page 670

Correct answers:

1 - (A); 2 - (C); 3 - (C); 4 - (C); 5 - (A); 6 - (D); 7 - (D); 8 - (C); 9 - (D); 10 - (B);

What's on your patient's face...

may be more important than his chief complaint

Patient P.T.* seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.

Patient P.T.* seen on 6/12/67, seven weeks after discontinuation of 5% FU cream. Reaction has subsided. Residual scarring not seen except that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J

The lesions on his face are solar/actinic— so-called "senile" keratoses... and they may be premalignant.

Solar, actinic or senile keratoses

hese lesions may be called by several names, but they sually can be identified by the following characteris- cs. The typical lesion is flat or slightly elevated, of a ownish or reddish color, papular, dry, rough, adherent nd sharply defined. They commonly occur as multiple sions, chiefly on the exposed portions of the skin.

Sequence of therapy— electivity of response

fter several days of therapy with Efudex® (fluorouracil), ythema may begin to appear in the area of the lesions; is reaction usually reaches its height of unsightliness nd discomfort within two weeks, declining after dis- ntinuation of therapy. This reaction occurs in affected eas. Since the response is so predictable, lesions that not respond should be biopsied.

Acceptable results

eatment with Efudex provides highly favorable cos- etic results. Incidence of scarring is low. This is par- ularly important with multiple facial lesions. Efudex ould be applied with care near the eyes, nose and mouth.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

This patient's lesions were resolved with

Efudex®

fluorouracil/Roche®

5% cream/solution...a Roche exclusive

Popular Diet Causes Rise In Cholesterol

A currently popular dietary method—the Stillman diet—causes an immediate rise in cholesterol levels in the blood and is risky for middle-aged persons who may have heart disease, says a report from the American Medical Association.

A research group from Peter Brent Brigham Hospital and Harvard Medical School at Boston conducted a trial study of the diet with 12 hospital employees. The average blood cholesterol level increased 16 per cent in the subjects during the diet period, which varied from three to 17 days and averaged one week, the researchers found.

The diet, explained in a popular book that has sold more than five million copies, is basically a carbohydrate-restricted diet that is rich in protein and animal fat. It also calls for drinking at least eight glasses of water a day, and is sometimes called the Water Diet.

During the dietary trial at the Boston hospital most of the subjects complained of easy fatigue, lassitude, mild nausea and occasional diarrhea. Some of them felt these symptoms interfered with their work and discontinued the diet after only a few days, the report says.

The average amount of cholesterol consumed per day on the Stillman diet was more than twice the amount in the average American diet.

The subjects did lose weight—average drop of seven pounds in an average of seven days—but "the weight loss was very transient." Most subjects regained the lost weight once the diet was discontinued.

The temporary elevation of cholesterol probably does not harm healthy young dieters, such as those in the study group, but "one must consider the potential effects of the prolonged or repetitive use of this diet by middle-aged persons who may have coronary artery disease," they say.

NEW! Patient Therapy Packs

Because many patients tend to stop treatment prematurely, the full course of b.i.d. therapy is now specially packaged to encourage patients to complete the full course of therapy.

CANDEPTIN Vaginal Ointment Therapy Pack— two 75 gm. tubes
CANDEPTIN Vagelettes Therapy Pack—28 vaginal capsules
CANDEPTIN Vaginal Tablet Therapy Pack—28 vaginal tablets

Brief Summary

Description: CANDEPTIN (Candicidin) Vaginal Ointment contains a dispersion of Candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate.

CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.

Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.

Indications: Vaginitis due to *Candida albicans* and other *Candida* species.

Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.

Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.

Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in a Patient Therapy Pack, containing two 75 gm. tubes with two applicators for the full course of treatment. CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN Vagelettes Vaginal Capsules are packaged in a Patient Therapy Pack, containing 28 CANDEPTIN Vagelettes Vaginal Capsules (2 boxes of 14), for the full course of treatment. Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References:

1. Melges, F. J.: Obstet. Gynecol. *24*:921, Dec. 1964. 2. Cameron, P. F.: Practitioner *202*:695, May 1969. 3. Olsen, J. R.: Journal-Lancet *85*: 287, July 1965. 4. Giorlando, S. W.: OB/GYN Digest *13*:32, Sept. 1971. 5. Decker, A.: Case Reports on file, Medical Department, Julius Schmid. 6. Friedel, H. J.: Md. State Med. J. *15*:36, Feb. 1966. 7. Roberts, C. L. and Sullivan, J. J.: Calif. Med. *103*:109, Aug. 1965. 8. Giorlando, S. W., Torres, J. F. and Muscillo, G.: Am. J. Obstet. Gynecol. *90*:370, Oct. 1, 1964. 9. Abruzzi, W. A.: Western Med. *5*:62, Feb. 1964.

Innovators in candicidin therapy

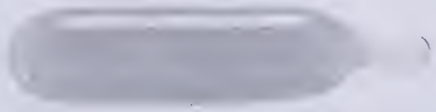
SCHMID LABORATORIES INC.
LITTLE FALLS NEW JERSEY 07424

Candeptin®
(candicidin)

The highly effective monilia-cide with high cure rates proved clinically.[1-9]

- *the only candicidin available in three dosage forms* for complete therapeutic flexibility—even for adolescent and gravid patients.
- *Symptomatic relief* in many patients as early as 48-72 hours[1-3]; usually cures in a single 14-day course of therapy.
- *Exact dosage assured* when used as directed.
- *High patient acceptability*, easy to use in all forms; helps keep patients on the full 14-day regimen—important in controlling recurrences.
- *Clinically proved*—CANDEPTIN Vaginal Ointment and Vaginal Tablets have more than nine years of clinical experience.
- Sensitivity and temporary irritation with CANDEPTIN (candicidin) Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules have been extremely rare.

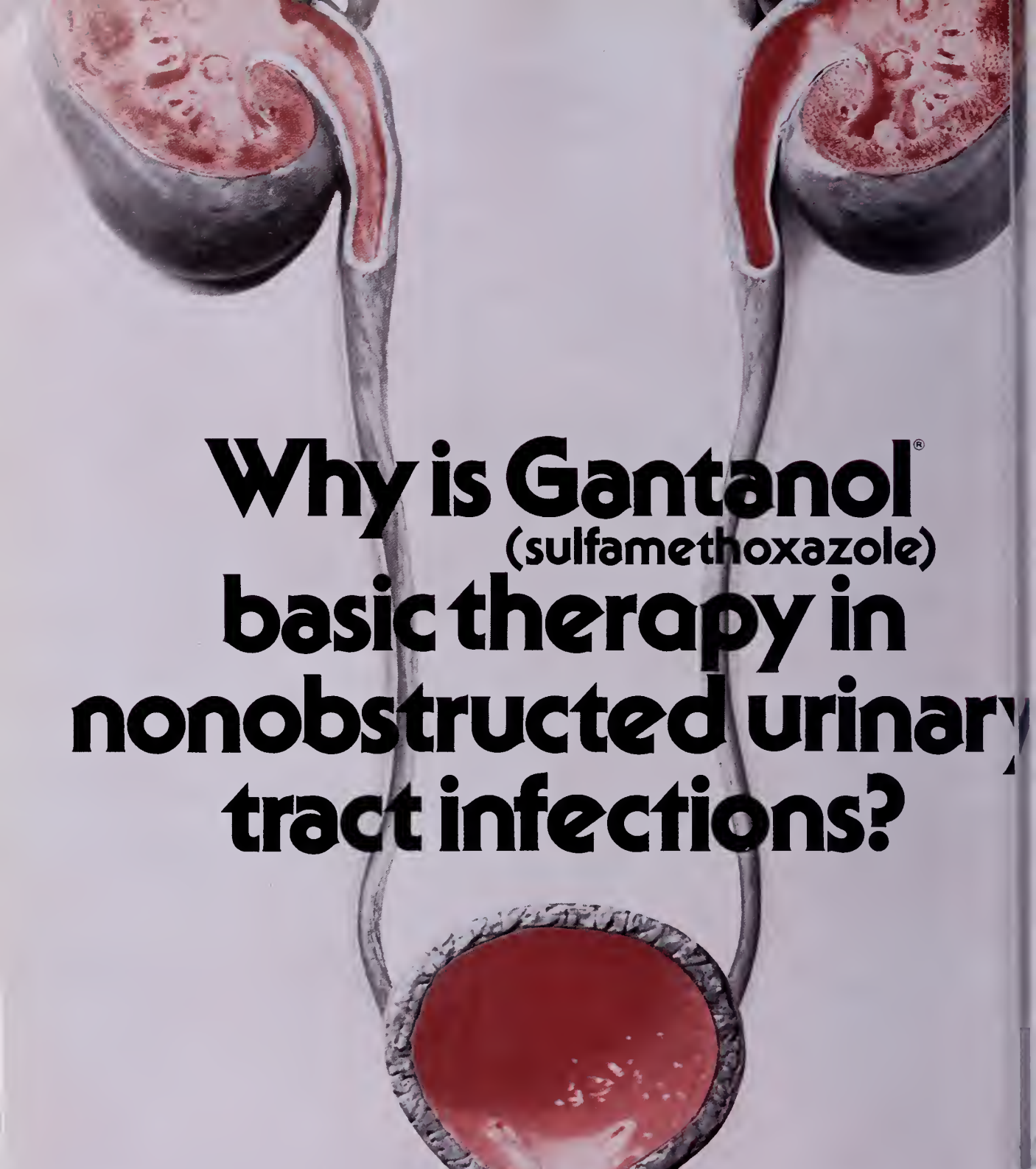
And a dosage form for all your patients



VAGELETTES™ Vaginal Capsules

Vaginal Ointment

Vaginal Tablets



Why is Gantanol® (sulfamethoxazole) basic therapy in nonobstructed urinary tract infections?

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic strep-

tococcal infections and will not eradicate o
vent sequelae (rheumatic fever, glomerulonep
of such infections. Deaths from hypersensitivity
tions, agranulocytosis, aplastic anemia and other
dyscrasias have been reported and early clinical signs
throat, fever, pallor, purpura or jaundice) may indicate s
blood disorders. Frequent CBC and urinalysis with micros
examination are recommended during sulfonamide therapy. I
cient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired re
hepatic function, severe allergy, bronchial asthma; in gluco
phosphate dehydrogenase-deficient individuals in whom
related hemolysis may occur. Maintain adequate fluid inta
prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, a
tic anemia, thrombocytopenia, leukopenia, hemolytic anemia

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- for efficacy in nonobstructed cystitis, pyelonephritis and pyelitis
- for control of susceptible *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*
- for prompt antibacterial blood and urine levels in from 2 to 3 hours after initial 2-gram adult dose
- for economical around-the-clock coverage
- for maximum patient cooperation with easy-to-remember B.I.D. dosage

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(0.5 Gm) (0.5 Gm/teasp.)

a, hypoprothrombinemia and methemoglobinemia); *allergic ctions* (erythema multiforme, skin eruptions, epidermal necroly- urticaria, serum sickness, pruritus, exfoliative dermatitis, ana- actoid reactions, periorbital edema, conjunctival and scleral ction, photosensitization, arthralgia and allergic myocarditis); *trointestinal reactions* (nausea, emesis, abdominal pains, hepa- diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* adache, peripheral neuritis, mental depression, convulsions, ia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous ctions* (drug fever, chills, toxic nephrosis with oliguria and ria, periarteritis nodosa and L.E. phenomenon). Due to certain mical similarities with some goitrogens, diuretics (acetazola- e, thiazides) and oral hypoglycemic agents, sulfonamides have sed rare instances of goiter production, diuresis and hypogly- ia as well as thyroid malignancies in rats following long-term inistration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

General Practice—

Age 33; University of Western Ontario, 1972; seeking solo, associate or emergency room practice. LW-1/1

Age 31; University of Texas, 1973; Available July 1974. LW-1/2

Emergency Room—

Age 28; Louisiana State University, 1972; Available July 1974. LW-2/1

Hospital Administration—

Age 58; Indiana University, 1942; Board eligible; seeking hospital administration, executive medical director, medical research program or public relations. LW-3/1

Internal Medicine—

Age 37; Tulane, 1966; Board eligible; seeking solo, associate in family practice-internal medicine. LW-4/1

Age 30; Medical College of South Carolina, 1970; National Board; Board certified; seeking associate or group. Available July 1974. LW-4/2

Age 32; University of Alabama, 1968; National Board, Board certified; seeking group practice. Available July 1974. LW-4/3

Age 31; Medical College of Georgia, 1968; Board eligible; seeking associate practice in North Alabama or coastal area. Available July 1975. LW-4/4

Age 33; Medical College of South Carolina, 1966; Board certified; seeking group or associate. Available September 1975. LW-4/5

Age 32; Emory University, 1968; seeking solo, associate or group practice. Available July 1975. LW-4/6

Age 45; Washington University, St. Louis, 1954; Board certified; seeking solo, associate or group practice (interest in gastroenterology). Available August 1975. LW-4/7

Age 36; University of Pittsburgh, 1967; National Board, Board certified; seeking associate or group practice (interest in gastroenterology). Available July 1974. LW-4/8

Orthopedics—

Age 32; University of Illinois, 1966; National Board, seeking group or associate preferably in south Alabama. Available July 15, 1974. LW-5/1

Age 33; Hahnemann, 1968; National Board; Board eligible; seeking associate practice. Available July 1975. LW-5/2

Pathology—

Age 36; Medical College of Georgia, 1964; National Board; Board certified; seeking group practice or director or associate director preferably in major metropolitan areas. Available July 1974 LW-6/1

Age 41; Ohio State University, 1959; Board certified; seeking institutional practice, clinical and/or anatomical. Available summer 1974. LW-6/2

Pediatrics—

Age 54; University of Tennessee, 1944; Board certified; seeking associate in general medicine-pediatrics. Available June 1974. LW-7/1

Age 33; Seoul National University, Korea, 1965; Board eligible; seeking hospital based practice or group practice. LW-7/2

Age 31; Chicago Medical School, 1969; National Board; Board eligible; seeking associate or group practice. Available July-August 1974. LW-7/3

Surgery—

Age 33, Medical College of Virginia, 1967; National Board, Board eligible, seeking associate or group (general and vascular). Available 8/74. LW-8/1

Urology—

Age 33; Tulane, 1966; Board eligible; seeking associate or group practice. Available August 1974. LW-9/1

Age 32; Georgetown University, 1968; National Board; Board eligible; seeking associate, group or industrial. Available Fall 1975. LW-9/2

Physicians Wanted

General Practitioners—

Physician wanted for general practice, group or associate, in University town of 40,000 population. Salary and partnership negotiable. PW-1

General Practitioner wanted for multi-specialty group practice on Bay in South Alabama. Modern

offices, near hospital. Salary with incentive available. Excellent churches, schools and recreational facilities. PW-2

Associate wanted in a three physician general practice in a rural county near Mobile. Salary initially with anticipated early partnership arrangement. 30-bed county hospital adjoining the office. PW-3

Opportunity for General Practitioner in South Alabama community with a trade area of 20,000 to 25,000 population. Modern hospital with certified surgeon, radiologist, and cardiologist on staff. Present physicians interested in partner, forming Professional Association or may enter into private practice. Free office space available, or physicians in the area interested in building new office building. Excellent school system with junior college within 15 miles. PW-4

Family physician needed as associate with well established physician in small North Alabama town. Modern, fully equipped hospital. Office space and equipment available. Salary negotiable plus other benefits. PW-5

Opportunity for young internist or family physician to join three man group in rapidly growing town of 12,000 population in Tennessee Valley. Excellent hospital. Modern well-equipped office. PW-6

Opportunity in southeast Alabama in town of 3,000 population, trade area of 15,000 population. Nearest large city, 8 miles, 40,000 population, and 2 large hospitals. Office space and housing readily available. Industrial and agricultural area. Churches, schools, civic and social activities. PW-7

Opportunity in south Alabama in town of 2,700 population, trade area of 15,000 population. Nearest large city of 30,000 population located 45 miles. Nearest hospital is 10 miles. One physician now engaged in practice in the town. Necessary arrangements will be made for office space, equipment, and housing. Industrial and agricultural area. Churches, schools, civic and social activities. PW-8

Special Openings—

Wanted, internists, generalists, radiologist, orthopedist, general surgeons. Town of 15,000 population in county of 45,000 population located in Southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-9

Opportunity for **Cardiologist** interested in hospital based practice centering around special procedures in cardiology, including cardiac catheterization, coronary arteriography, pacemaker work, preoperative and postoperative care of cardiac surgical patients in Montgomery. PW-10

General Surgeon and Ophthalmologist wanted for community of 22,000 population and 45,000 service area. New hospital with eight general practitioners and one Board certified radiologist. Schools for blind and deaf located in the town. Excellent schools and recreational facilities. PW-11

The Ob-Gyn Department of a hospital located in eastern end of Birmingham, Alabama and adjoining an unincorporated area of approximately 133,000 young families is seeking additional **obstetricians** to set up practice in new professional building adjoining 300-bed, short-term, general hospital. The Obstetrical Department, completed September 1972, offers the most modern concept in patient care in Southeast; unlimited teaching and education opportunities for the young obstetrician. Five nurseries. Sleeping rooms and lounge facilities for staff. Committee willing to subsidize expenses until practice established. PW-12

$ Health Spending Reached $94 Billion Last Year

Health outlays last fiscal year for the nation reached $94.1 billion, an 11 per cent increase, the lowest rate in several years. The proportion of total health spending to the Gross National Product remained at the 1972 level—7.7 per cent. Per capital expenditures rose $41 to $441, including private and government spending.

The Social Security Administration's preliminary figures for the fiscal year that ended last July showed per capita private spending on health of $265 and government spending of $176 per person for the year.

The ratio of public versus private health spending continued the trend of two decades toward more government spending. The ratio for fiscal 1973 was 60.1 per cent private and 39.9 per cent public. In 1928, the corresponding ratio was 86.7 per cent and 13.3 per cent.

Of the $94 billion total, $36 billion went for hospital care, $18 billion for physicians' services, compared with $32.6 billion and $16.6 billion the previous year.

Federal spending was estimated at $24.6 billion, up almost $2 billion; state and local, $12.9 billion, up more than $1.5 billion.

Expenses for prepayment and administration, largely private health insurance expenses, rose from $2.4 billion in fiscal 1972 to $3.3 billion in fiscal 1973.

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SIGHTS AND SOUNDS

ACS-506 Carcinoma of the Breast; Film #1—Biopsy of a Mass in the Breast, 1966 Francis D. Moore 35 m.

This is the first in a series of four films which describe in an integrated way the diagnosis, treatment, and late management of breast cancer in the female. The first film deals with the various techniques for biopsy, mammography, the co-existence of cystic disease with cancer and initial steps for definitive care.

ACS-507 Carcinoma of the Breast; Film #2—Choice of Primary Treatment; the Place of Radical Mastectomy, 1966 Francis D. Moore 45 m.

This second film deals with current controversy having to do with the diagnosis, treatment, and late management of breast cancer. Statistics are reviewed as they bear on simple mastectomy, irradiation, and oophorectomy. Specifically outlined from this discussion is treatment for patients.

ACS-508 Carcinoma of the Breast; Film #2—Radical Mastectomy and Postoperative Management, 1966 Francis D. Moore 40 m.

This third is a more conventional operative motion picture showing the techniques of radical mastectomy as exhibited in three patients.

ACS-509 Carcinoma of the Breast; Film #4—The Advanced Disease; Endocrine Management and Adrenalectomy, 1966 Francis D. Moore 50 m.

The fourth and last film deals with the advanced disease. It concerns the method of follow-up of the patient, the significance of the first metastatic pattern, endocrine studies, and biochemical discriminants. It ends with a conventional operative sequence showing the technique of bilateral adrenalectomy in one stage using the prone position.

DG-581 Open Reduction and Internal Fixation of Forearm Fractures, Cine Clinic, 1952 Harrison L. McLaughlin 35 m.

This film deals with the technic for the two standard procedures for operative reduction and internal fixation of forearm fractures, namely, fixation by intramedullary device and by plates and screws.

These films are available from the American College of Surgeons. There is a service charge of $7.50 for each film.

Johnson & Johnson's Patient Care Division has recently released a new film entitled "Tibial Fractures: A Functional Method of Treatment." This 16mm film lasts 25 minutes, and is in color. It was produced by Augusto Sarmiento, M. D., and William F. Sinclair, C. P. O., both of the University of Miami School of Medicine. Dr. Sarmiento is professor and chairman of the school's department of orthopaedics and rehabilitation.

The film discusses the clinical aspects and depicts actual applications of Dr. Sarmiento's technique for the treatment of tibial fractures, which permits early weight bearing and at the same time, affords unrestricted motion of all joints of the injured limb.

Copies of the film may be obtained from representatives of the Johnson & Johnson Patient Care Division.

ACS-026 Branchial Cleft Cysts and Sinuses: Their Embryologic Development and Surgical Management, 1959
William H. ReMine 14 minutes

The embryologic development of branchial cleft cysts and sinuses is graphically illustrated, demonstrating this concept of the origin of these lesions. The surgical management of branchial cleft cysts and sinuses, and a satisfactory method of removal of a long sinus tract, are shown with a technique which avoids unsightly scarring of the neck.

ACS-827 A Lateral Approach to the Larynx and Hypopharynx - 1971
Robert L. Rogers 20 minutes

This film demonstrates a useful lateral approach to the larynx and hypopharynx for the removal of benign and malignant lesions. The film demonstrates the removal of a laryngocele or a branchiogenic laryngeal cyst.

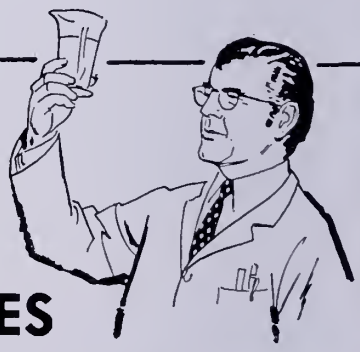
ACS-022 Bedside Tracheostomy, 1964
Benson B. Roe 12 minutes

The film consists of a brief but detailed description of instrumentation, approach, and technique of tracheostomy by a simplified method which makes it practical and feasible to accomplish the maneuver within a very few minutes without moving the patient to the operating room.

ACS-770 Congenital Tracheoesophageal Fistula Without Esophageal Atresia Diagnosis and Management 1970
Jordan J. Weitzman, L. Patrick Brennan, Seymour Cohen 18 minutes

This motion picture deals with the diagnosis and management of congenital tracheoesophageal fistula (H-type) in two patients. The natural history and methods of diagnosis are discussed. Very clear motion pictures of the esophagoscopy findings are shown. Surgical management is demonstrated; in each case the fistula was divided by way of a cervical approach.

Unless otherwise stated, the above films can be ordered from the American College of Surgeons at a cost of $7.50 per three day period which includes transportation to the users. Address your order to: American College of Surgeons, Surgical Film Library, Davis & Geck Distributor, 1 Casper Street, Danbury, Connecticut 06810



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respond to one

According to her major
mptoms, she is a psychoneu-
tic patient with severe
xiety. But according to the
escription she gives of her
elings, part of the problem
ay sound like depression.
his is because her problem,
though primarily one of ex-
ssive anxiety, is often accom-
nied by depressive symptom-
ology. Valium (diazepam)
n provide relief for both—as
e excessive anxiety is re-
ved, the depressive symp-
ms associated with it are also
ten relieved.

There are other advan-
ges in using Valium for the
anagement of psychoneu-
tic anxiety with secondary
pressive symptoms: the
ychotherapeutic effect of
alium is pronounced and
pid. This means that im-
ovement is usually apparent
the patient within a few
ys rather than in a week or
two, although it may take
longer in some patients. In ad-
dition, Valium (diazepam) is
generally well tolerated; as
with most CNS-acting agents,
caution patients against haz-
ardous occupations requiring
complete mental alertness.

Also, because the psycho-
neurotic patient's symptoms
are often intensified at bed-
time, Valium can offer an addi-
tional benefit. An *h.s.* dose
added to the *b.i.d.* or *t.i.d.*
treatment regimen can relieve
the excessive anxiety and asso-
ciated depressive symptoms
and thus encourage a more
restful night's sleep.

For further information
on this subject, the following
references are provided:

1. Henry BW, *et al: Dis Nerv Syst 30*:675-679, Oct 1969.
2. Hollister LE, *et al: Arch Gen Psychiatry 24*:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics 11*:438-441, Sept-Oct 1970.

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anxiety states
with associated
depressive symptoms

rveillance because of their predisposi-
n to habituation and dependence. In
egnancy, lactation or women of child-
aring age, weigh potential benefit
ainst possible hazard.

ecautions: If combined with other psy-
otropics or anticonvulsants, consider
refully pharmacology of agents em-
oyed; drugs such as phenothiazines,
rcotics, barbiturates, MAO inhibitors
d other antidepressants may potentiate
action. Usual precautions indicated in
tients severely depressed, or with latent
pression, or with suicidal tendencies.
Observe usual precautions in impaired
renal or hepatic function. Limit dosage to
smallest effective amount in elderly and
debilitated to preclude ataxia or over-
sedation.

Side Effects: Drowsiness, confusion, diplo-
pia, hypotension, changes in libido, nausea,
fatigue, depression, dysarthria, jaundice,
skin rash, ataxia, constipation, headache,
incontinence, changes in salivation,
slurred speech, tremor, vertigo, urinary
retention, blurred vision. Paradoxical re-
actions such as acute hyperexcited states,
anxiety, hallucinations, increased muscle
spasticity, insomnia, rage, sleep disturb-
ances, stimulation have been reported;
should these occur, discontinue drug. Iso-
lated reports of neutropenia, jaundice;
periodic blood counts and liver function
tests advisable during long-term therapy.

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PRESIDENT'S PAGE

J. GARBER GALBRAITH, M.D., PRESIDENT

Make Your Voice Heard

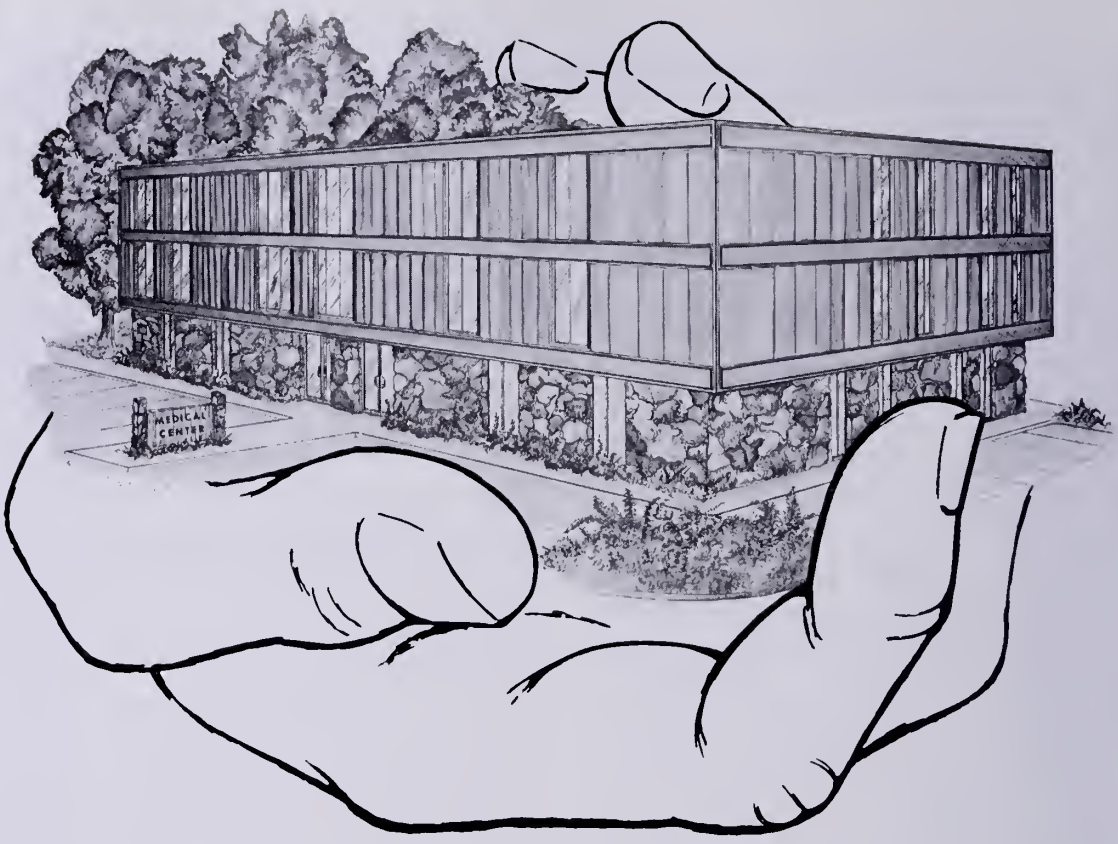
As this is being written Federal wage and price controls are being lifted. There can be no doubt that these controls have worked a hardship on the medical profession and the hospitals. We are now afforded the opportunity to correct these inequities insofar as inflation has increased our costs. At the same time we are reminded by Dr. Malcolm Todd, President-Elect of AMA, who addressed our annual session in Huntsville, that increases in professional fees should be kept within reasonable and justifiable limits. Congress has already begun hearings on the Mills-Kennedy bill to implement a federal medical care program, and any actions on the part of the medical profession which the Congress might interpret as excessive would surely be used as evidence in favor of need of federal regulation of professional fees. There can be no doubt of this since Medicare and Medicaid are already exercising such regulation. Aside from the political implications of our actions at this time, we should be ever aware of the fact that as a self-regulating profession we have a moral obligation to act with restraint and a sense of responsibility in the matter of professional fees.

At this time it is heartening to note that an overwhelming majority of Alabama physicians have enrolled in Alabama Medical Review, Inc. This organization has applied for designation as the single agency to administer PSRO in our area, and a planning grant application has been submitted. The various medical specialties are now developing criteria and guidelines through their participation in the Interspecialty Council of MASA for use in PSRO implementation. All physicians are encouraged to interest themselves in this endeavor so that their voices may be heard in the development of these criteria with which we will all have to live after January, 1976. It is hoped that the guidelines will be as broad and as flexible as possible so as to avoid undue restriction or encroachment of the usual patterns of medical practice. Properly constructed, the PSRO program can be a further means of insuring the quality of medical care in our area.

All who heard the presentations of the AMA representatives at the Orientation Session of our annual meeting in Huntsville could properly take pride in the caliber of those who are serving full time in behalf of organized medicine. Many favorable comments were received regarding this orientation program, and much credit goes to our Executive Secretary, Pat Patterson, for bringing these outstanding individuals to our program.

The annual convention of the AMA is being held in Chicago, June 22-26, 1974. In view of the many vital matters confronting organized medicine at this time all physicians are urged to attend this session if at all possible. The various reference committees will hear your views on specified matters of concern and in this way, a grass root impact can be achieved. Through our delegates we have a voice in all actions taken by The

(Continued on Page 724)



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NEW MEMBERS

Autauga County

Grubbs, Roy James, Jr., b 15, mc Pa. 41, sb 42, 311 South Memorial Drive. Prattville, Alabama 36067. Pd.

Calhoun County

Battles, William Melvin, Jr., b 39, mc Louisville 66, recip. Kentucky 73, 700 East 10th St., Anniston, Alabama 36201. U.

Stewart, Ronald Mitchell, b 40, mc Alabama 67, recip. NBME 70, P. O. Box 578, Anniston, Alabama 36201. ObG.

Colbert County

Bishop, Richard Perry, b 46, mc California 72, recip. California 73, West Colbert Health Clinic, P. O. Box 349, Cherokee, Alabama 35616. GP.

Hill, Matthew Robert, b 46, mc Illinois 72, recip. NBME 73, West Colbert Health Clinic, P. O. Box 349, Cherokee, Alabama 35616. GP.

Covington County

Feibelman, Nathan Donald, III, b 45, mc Mississippi 70, recip. Mississippi 73, P. O. Box 580, Andalusia, Alabama 36420. GP.

Etowah County

Sledge, William Webb, b 42, mc Tulane 70, recip. La. 71, 525 South 3rd St., Gadsden, Alabama 35901. GP.

Houston County

Bridges, Charles Roland, b 42, mc Emory 67, recip. Ga. 73, 1912 Fairview Avenue, Dothan, Alabama 36301. I.

Haley, John Hendon, Jr., b 40, mc Alabama 66, recip. NBME 67, 1625 E. Main, Dothan, Alabama 36301. Or.

Moore, Robert Wallace, Jr., b 41, mc Bowman Gray 68, recip. NBME 73, 509 W. Main, Dothan, Alabama 36301. Or.

Paschall, Walter Jent, b 39, mc Baylor 65, recip. Texas 73, 211 W. Main, Dothan, Alabama 36301. Oph.

Sullivan, James Solomon, b 42, mc Alabama 68, recip. NBME 69, 2019 Alexander Drive, Dothan, Alabama 36301. GP.

Jackson County

Bolton, Larry Taylor, b 45, mc Alabama 71, recip. NBME 72, Westchester Apts., Scottsboro, Alabama 35767. GP.

Jefferson County

Austin, James Maxwell, Jr., b 41, mc Alabama 67, sb 68, UAB Medical Center, University Station, Birmingham, Alabama 35294. ObG.

Bapat, Kumudini S., b 37, mc Grant Medical College, Bombay, India 66, Limited License 72, UAB Medical Center, Heart Evaluation Clinic, Birmingham, Alabama 35233. Anes.

Boyd, Allie Cosper, III, b 41, mc Alabama 66, recip. NBME 67, Norwood Clinic, 1529 N. 25th St., Birmingham, Alabama 35234. P.

Daniel, William Walter, Jr., b 38, mc Northwestern Univ., Evanston, Ill. 65, recip. NBME 73, 619 South 19th St., Birmingham, Alabama 35233. R.

Dudley, Robert Hamelin, b 28, mc Alabama 54, sb 55, 701 Ridgeway Rd., Fairfield, Alabama 35064. Path.

Ernst, Frederick William, b 40, mc Ohio 66, recip. Ohio 73, 1601 6th Avenue, South, Birmingham, Alabama 35233. Anes.

Hodges, Steven Carnot, b 43, mc Arkansas 72, recip. NBME 73, 1506 2nd Ave., North Bessemer, Alabama 35020. GP.

Jones, Dewey Hobson, III, b 42, mc Alabama 69, sb 70, 3232 Mockingbird Lane, Birmingham, Alabama 35226. Or.

Pittman, Constance Shen, b 29, mc Harvard 55, recip. NBME 60, University of Alabama School of Medicine, Birmingham, Alabama 35294. I.

Savage, Perry Lauren, b 42, mc Alabama 68, sb 69, Univ. Hospital, 619 South 19th St., Birmingham, Alabama 35233. Or.

Skalka, Harold Walter, b 41, mc New York 66, recip. NBME 71, 1720 8th Avenue South, Birmingham, Alabama 35233. Oph.

Lauderdale County

Rausch, Robert Oswald, b 40, mc Loma Linda 67, recip. NBME 73, 401 W. College St., Florence, Alabama 35630. R.

Lee County

Widener, Jon Howard, b 41, mc Louisville 68, recip. Kentucky 70, 121 North 20th St., Opelika, Alabama 36801. Or.

Macon County

Zabriskie, Charles Vard, b 23, mc Utah 49, recip. Utah 74, Drawer C., VA Hospital, Tuskegee, Alabama 36083. U.

Madison County

Gray, Edwin Ronald, b 41, mc Alabama 67, sb 68, 410 Lowell Drive, Huntsville, Alabama 35801.

Smith, Herbert Thomas, b 23, mc Baylor 52, recip. Texas 73, Family Practice Center, Huntsville, Alabama 35801. GP.

Mobile County

Boudreau, Floyd Thomas, III, b 43, mc Alabama 67, recip. NBME 68, 2451 Fillingim St., Mobile, Alabama 36617. Path.

Coker, Albert Steinhart, Jr., b 39, mc Alabama 65, sb 66, 1217 Government St., Mobile, Alabama 36604. I.

Kimmich, Homer Marshall, b 27, mc Temple 55, recip. Pa. 73, 1453 Springhill Avenue, Mobile, Alabama 36604. OALR.

Walsh, David Guy, b 42, mc Alabama 67, sb 68, 241 Cox St., Mobile, Alabama 36604. Anes.

Wilkerson, Wallace Whitfield, b 35, mc Alabama 61, sb 62, 3168 A-Midtown Park South, Mobile, Alabama 36604. P.

Montgomery County

Case, Iverson Clark, Jr., b 16, mc Ga. 44, recip. Ga. 73, 118 Ocala Dr., Montgomery, Alabama 36109. Admin.

Finklea, John Lee, b 40, mc Alabama 65, sb 66, 1415 E. South Blvd., Montgomery, Alabama 36111. C.

Morgan County

New, Troy Gerald, b 42, mc Alabama 67, sb 68, 13th Ave. at Medical Dr., S. E., Decatur, Alabama 35601. ObG.

Tuscaloosa County

Bobo, Phillip Kelley, b 44, mc Alabama 72, recip. Tenn. 73, Druid City Hosp., Univ. Blvd., Tuscaloosa, Alabama 35401. GP.

Hefelfinger, David Charles, b 38, mc North Carolina 65, recip. Fla. 74, 922 5th Avenue East, Tuscaloosa, Alabama 35401. Pd.

Walker County

Hamilton, Gilbert Leroy, b 22, mc Indiana 53, recip. Indiana 73, Jackson Clinic, Jasper, Alabama 35501. I.

MEMBERS DECEASED

Bibb County

Nicholson, Cooper, Centreville, Alabama, Deceased

(Continued on Page 737)

WOMAN'S AUXILIARY

EVELYN O'BRIEN, PRESIDENT

Volunteering For Better Community Health

The Woman's Auxiliary's theme for the year is—"Volunteering for Better Community Health." The importance of this subject has been emphasized by the National Auxiliary and the American Medical Association which provided me with much of the following information.

A community is defined as individuals in groups occupying a local environment. The basic group in American society has always been the nuclear family. The American family unit has always been responsible for the training and education outside formal schooling. Recreation, social graces and attitudes, morals, health, security—both social and financial—were all family responsibilities.

But, our society became more fluid, cutting away at a family's roots in a community and destroying the continuity and security of established family customs. Organized activities and recreation have taken the place of family togetherness and many of the responsibilities which once belonged to the family have shifted to the community.

The state of health of an individual is his own responsibility but sometimes ignorance, physical, mental or economic inability of an individual make him incapable of assuming the responsibility of his own health. Hence, it becomes a community responsibility.

We hope this year to encourage each county auxiliary to forget about what is tradition and look at the community and find out just what situation now exists. We need to survey the situation, seeking out and recognizing the existing needs of our present day community and adjust our own thinking and actions as an auxiliary to fill these needs.

Much is said these days about each American's "right to good health and adequate medical services". Each American also has a right as well as an obligation to help himself achieve good health. Perhaps, through our efforts in Community Health, we can help others to help themselves achieve the "right to good health" and in doing so help to improve the quality of life for each and everyone of us.

PRESIDENT—Mrs. Donald J. O'Brien/PRESIDENT-ELECT—Mrs. William Hughes/FIRST VICE-PRESIDENT—Mrs. J. E. Dunn, Jr./NORTHWEST DISTRICT VICE-PRESIDENT—Mrs. Charles Howell/NORTHEAST DISTRICT VICE-PRESIDENT—Mrs. Roland Murphree/SOUTHWEST DISTRICT VICE-PRESIDENT—Mrs. Charles Weaver/SOUTHEAST DISTRICT VICE-PRESIDENT—Mrs. Robert Foy/WAMASA EDITOR—Mrs. William L. Smith.

(Continued from Page 719)

House of Delegates of AMA, so you are urged to let them know your views on all important issues. In addition, there will be a fine scientific program with material of interest to all physicians and this alone should be incentive enough for attendance at the meeting.

Hope to see you in Chicago in June.

J. Garber Galbraith, M. D.

Acupuncture Fails To Cure Deafness In Research Study

Acupuncture failed to cure nerve deafness in a carefully controlled scientific study at Michigan State University.

The use of acupuncture for anesthesia and as treatment of a number of ailments has attracted the attention of both the public and the medical community in recent years. Within the past two years an increasing number of hearing-impaired patients have been undergoing acupuncture treatments. Several earlier studies had reported tentatively some success.

The research group at Michigan State brought in a trained acupuncturist with 15 years experience to treat an ex-serviceman deafened by firing weapons in combat in World War II. He was given eight treatments at one-week intervals. His hearing was measured scientifically with a battery of audiological tests before, during and after the treatments.

There was no evidence that the acupuncture treatments resulted in any measureable change in the patient's sensorineural hearing loss, the researchers report.

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: 'Rondomycin' (methacycline HCl): 150 mg and 300 mg capsules, syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

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When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

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*Since many strains are known to be resistant, routine sensitivity testing is recommended.

For relief of low back pain*
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Bed rest, moist heat, exercise and 'Soma 350' (carisoprodol) can help relax muscle spasm, relieve mild-to-moderate pain, restore range of motion.*

Economically...with only one tablet *q.i.d.*

Measure the results yourself. (Wallace will even send you a complimentary goniometer.)

* **Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indication as follows:

"Possibly" effective: for symptomatic relief in conditions characterized by skeletal muscle spasm and mild to moderate pain.

Final classification of this indication requires further investigation.

Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to carisoprodol or related compounds such as meprobamate, mebutamate, tybamate.

Warnings: *Idiosyncratic Reactions:* Rarely, first dose has been followed by extreme weakness, transient quadriplegia, dizziness, ataxia, temporary vision loss, diplopia, mydriasis, dysarthria, agitation, euphoria, confusion, disorientation. Symptoms usually subside during the next several hours. Supportive and symptomatic therapy, including hospitalization, may be necessary.

Pregnancy and Lactation: Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursin mothers, or women of childbearing potential.

Children Under Five: Drug not recommended.

Potentially Hazardous Tasks: Driving a motor vehicle or operating machinery.

Additive Effects: Possible additive effects between carisoprod alcohol, and other CNS depressants or psychotropic drugs.

Drug Dependence: Use cautiously in addiction-prone patient

Precautions: To avoid excess accumulation, use caution in patients with compromised liver or kidney function.

Adverse Reactions: *Central Nervous System:* Drowsiness, dizziness, vertigo, ataxia, tremor, agitation, irritability, headache, depressive reactions, syncope, insomnia.

Allergic or Idiosyncratic: Usually seen after 1-4 doses in patier not previously exposed, e.g., rash, erythema multiforme, pruritus, eosinophilia, fixed drug eruption with cross reaction to meprobamate. More severe manifestations: asthma, fever, weakness, dizziness, angioneurotic edema, smarting eyes, hypotension, anaphylactoid shock. Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines and in severe cases corticosteroids).

Cardiovascular: Tachycardia, postural hypotension, facial flushing.

Gastrointestinal: Nausea, vomiting, hiccup, epigastric distress

Hematologic: Leukopenia and pancytopenia (on carisoprodol plus other drugs).

Usual Adult Dosage: One 350 mg tablet three times daily and at bedtime.

Overdosage: Has produced stupor, coma, shock, respiratory depression, and, very rarely, death. Overdosage of carisoprodol plus alcohol or other CNS depressants or psychotropic drugs can be additive. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Carisoprodol is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully with related drug meprobamate. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption.

Before prescribing, consult package circular or latest PDR information. Rev 5 72

WALLACE PHARMACEUTICALS Cranbury, N. J. 08512

Soma® 350 its power may
(carisoprodol) 350 mg tablets

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Baby's fine,

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After episiotomy or Caesarean section, Empirin® Compound with Codeine every four hours can help to keep mother comfortable.

Empirin Compound with Codeine is available in dosage strengths to relieve all degrees of moderate to severe pain, up to that requiring morphine or its equivalent, and is effective for visceral as well as musculoskeletal pain. The codeine component provides an antitussive bonus, when coughing could put unwanted stress on sutures.

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Empirin Compound with Codeine **No. 3,** codeine phosphate* 32.4 mg. (gr. ½); **No. 4,** codeine phosphate* 64.8 mg. (gr. 1). *Warning—may be habit-forming. Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Empirin® Compound c̄ Codeine

#3, codeine phosphate* (32.4 mg.) gr. ½
#4, codeine phosphate* (64.8 mg.) gr. 1

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Was It Due To Quackery, Witchcraft or Complacency?

By
Emmett B. Carmichael
Professor Emeritus of Biochemistry
University of Alabama in Birmingham
Medical Center

The story that I am relating is true but due to the fact that some of the physicians descendants are still living, the name Coe has been substituted.

During the winter of 1904-1905, my mother Amelia, had pneumonia and her physician was Dr. William Coe.[1] Dr. Coe had been our family physician and had delivered my three sisters, my three brothers and me.

My mother was an avid reader and that helped her while she was convalesing. She also liked to play card games and one evening while she was still convalesing, she and I had a two handed game of Flinch, the Methodist substitute for ordinary playing cards. Once while I was waiting for her to play the next card I noticed that a small necked white bottle was hanging from near the top of the left side of one of the lace window curtains. The bottle was of clear glass and it was approximately three-fourths full of a liquid. Then I noticed that there was another bottle hanging on the right side of the right curtain of the same window. There were three windows in the room and two bottles were hanging on the curtains at each window. All of the bottles were about three-fourths full of the liquid and the bottles were not stoppered.

At that time I asked my mother why the bottles were hanging at the top of the lace curtains and what they contained. She said that Dr. Coe had put a solution of carbolic acid in the bottles to sterilize the room so that other members of the family would not catch pneumonia. No doubt Dr. Coe, who had received the M. D. degree about 35 years before the above experience, had read or heard about Sir Joseph Lister's aseptic surgical techniques. Lister had reported his findings at the 39th Annual Meeting of the British Medical Association on August 10, 1871 at Plymouth. As a member of the American Medical Association, Dr. Coe should have read about Lister's contribution to aseptic surgery. However, Dr. Coe's interpretation and application of the new knowledge left something to be desired. In other words, his medical education and training in the 1860's failed to prepare him to accept and apply new knowledge in his own practice.

Sir Joseph Lister, Professor of surgery, Glasgow University, 1860-1869, who founded aseptic surgery, advanced the use of carbolic acid as a germicide on wounds and dressings as early as 1865. At first he used a 1-20 aqueous solution of carbolic acid for cleansing the surgeon's and assistant's hands, the patients body, instruments, thread and dressings. He mopped the wound with a piece of lint that was saturated with the solution. He sterilized the air surrounding the area where the surgery was being performed by means of a steam spray of a 1-100 carbolic acid. He used a Richerdson's apparatus which produced a spray that was destitute of drops and he stated that it was little courser than a London fog.

The Association of American Medical College's curriculum Directory, for 1972-1973 list sixteen Schools of Medicine with a three calendar year program and twenty-four School of Medicine that were providing both a four year course and an option for three year graduation. The following six schools were included in the first group: Alabama, Rush, Nebraska, Ohio State, Tennessee and Baylor. The second group which provided the option for the three year graduation included Colorado, Duke, Indiana, Northwestern, Pennsylvania and the University of Virginia.

It is interesting to note that the following Schools of Medicine did not participate in the three year program: Harvard, Johns Hopkins, Michigan, Washington University and Yale. However, all five of them permitted an all elective fourth year.

There have been mixed feelings by many individuals about the three year program and especially since the basic sciences have been neglected. It is rumored that several of the schools with the three year programs are considering going back to the regular four year curriculum.

Is the example of Dr. Coe the only such incident that has been recorded? With the accelerated programs which have reduced the time spent on the basic sciences, have the schools prepared their graduates with a foundation from which they will be able to integrate new medical discoveries into their practice? If not, the lay population may learn about many interpretations of the effects of new drugs that may be just as weird as Dr. Coe's use of carbolic acid to sterilize a room against pneumonia.

Since 1930, a high per cent of the Nobel Prizes for Medicine and Physiology have been awarded to United States Citizens. They have been exposed to a rigid discipline which has stressed the basic sciences as a foundation for the practice of scientific medicine. Many of the United States Nobel Laureates received their awards for discoveries related to biochemistry and physiology. If the accelerated three year program, which has reduced the time that has been alloted to basic sciences in the past, is continued, should we be content to have our scientists denied the chance to be considered for Nobel Prizes and other high honors because we have allowed the three year programs to prevail?

In any case the above vignette points up the usefulness and need of continuing medical education.

REFERENCES

1. Baronetcy conferred on Joseph Lister for his contributions to antiseptic surgery. J. A. M. A. 2:69, Jan. 19, 1884.

1(a) Curriculum Directory, Association of American Medical Colleges, 1972-1973.

2. Debate on Antiseptic Surgery. The Lancot. 2:850-854, Dec. 6, 1879.

3. Emperor of Germany conferred the Order of Merit for Science and Arts on Sir Joseph Lister because of the beneficent results obtained by his antiseptic method during the Franco-German War. Science, 5:183, Feb. 27, 1885.

(Continued on Page 737)

PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

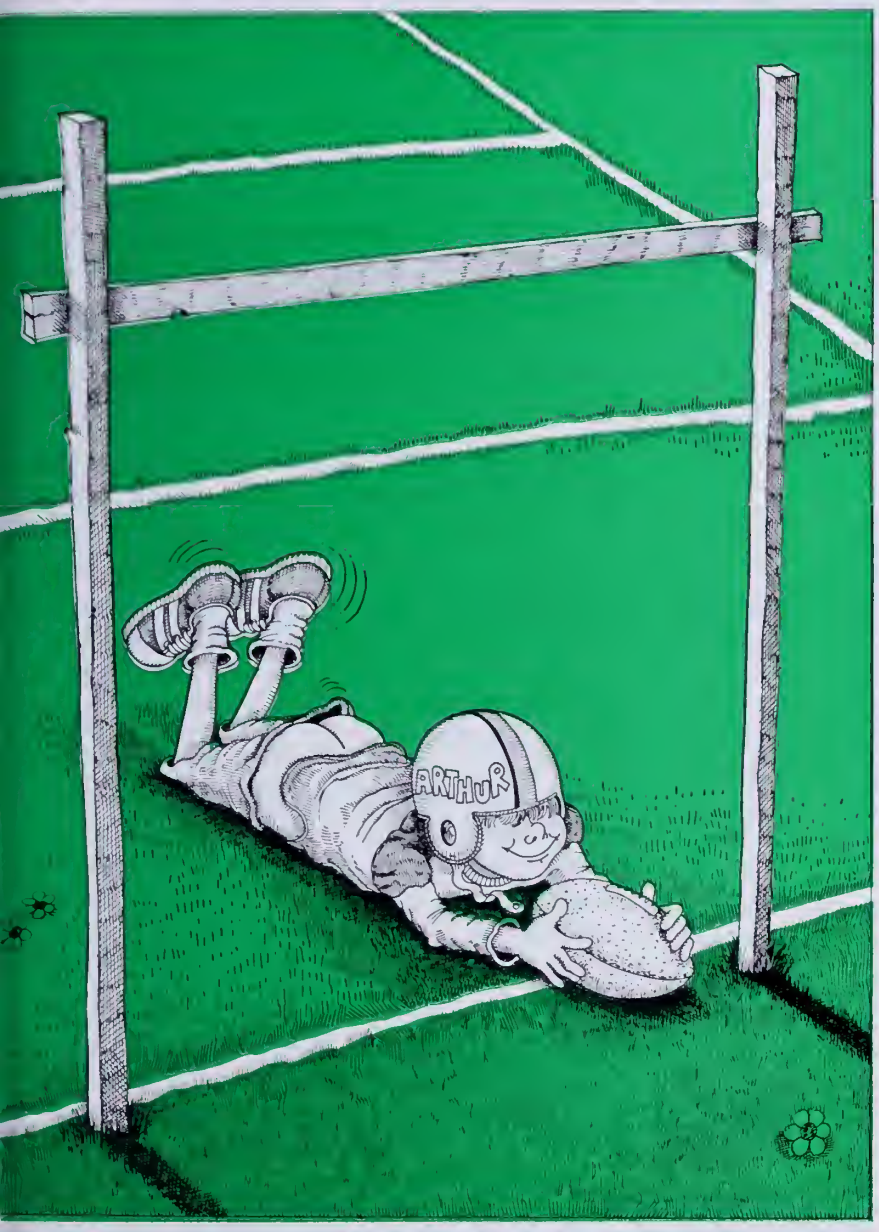
Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



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CONTINUING MEDICAL EDUCATION

Actions Taken At The 1974 Annual Session Relative to CME Requirements

Larry Dixon

With the necessary postponement of the proposed adoption of a new Constitution and Bylaws, the most important item considered by the House of Delegates and College of Counsellors at the 1974 Annual Session of the Medical Association of the State of Alabama was Resolution #12/73, a constitutional amendment intended to require continuing medical education for association membership.

The proposed amendment stated, "Membership in the Medical Association of the State of Alabama is dependent upon the continuing medical education requirements as specified in the Bylaws." The resolution was purposely drafted in a simplified form in an effort to keep the amendment short and to the point and place the specifics which are more detailed and cumbersome in the larger document, the Bylaws.

Those members testifying against the resolution before Reference Committee C, the committee which acted upon medical education matters, were mainly concerned with a lack of understanding of the specified requirements which had been professed to them by their colleagues at home. The proponents believed the requirements, which use as a basis the AMA's Physician's Recognition Award were comprehensive as now written.

The Reference Committee, after careful and detailed consideration decided to recommend the establishment of a three year voluntary "trial" period. A period in which everyone would be able to familiarize themselves with the procedure involved, as well as, for some, establish the practice of regularly attending continuing medical education conferences. The culmination of the trial or voluntary period would be the reception of the AMA's Physician's Recognition Award and the, to be created, MASA's Physician's Recognition Award. Mention was also made of the advantage such a period would provide to the staff members responsible for maintaining the records.

The committee's recommendation specifically stated the beginning and end of the first required period. Their report read, "These continuing medical education membership requirements will become effective July 1, 1977, with the initial three year continuum ending June 30, 1980. (Beginning July 1, 1977, all members will be required to have complied by June 30, 1980.)"

Those speaking to the Reference Committee also expressed concern over the authority such a requirement would place in the hands of the Education Committee. Much was said about the Education Committee, an appointed committee, usurping extreme power. The Reference Committee believed mention of this should be made. In their collective view, the requirements were not a stepping stone to power for the Education Committee, and their comments indicated this matter was of little concern to them. "The Reference Committee draws the members attention to the third sentence of Section II, Table of Organization, which states, 'The Board of Censors will serve as an arbitration committee, if a decision of the Education Committee is questioned' and to the first sentence, third paragraph of Section IV, Implementation, which states, 'The Medical Education Committee will be responsible for keeping records and supplying the Board of Censors with the names of those members

who have not complied within the required period.' " Reference Committee C was satisfied that the above statements settled the controversy over the power of the Education Committee.

The Board of Censors in their actions made little of the cme requirements for membership, they were mainly concerned with the possibility of a program of such magnitude starting out under an aura of confusion and misunderstanding. Therefore, they recommended the amendment to require cme be approved with the voluntary period included as suggested by the reference committee, but, that the exact starting period for the requirements be tabled for one year to allow the Education Committee time to thoroughly familiarize the membership with the specifics of the program.

At the Annual Business Session the Delegates and Counsellors concurred with the Censors. In so doing, they voted to amend the constitution and require cme for membership, initiated the three year voluntary period, created the MASA's Physician's Recognition Award and decided to wait another year before setting a specific starting date. They also charged the Education Committee with initiating a program to explain the basis for future membership.

Little mention was made of the cme requirement itself. The membership of this Association apparently has accepted the idea of imposing an educational requirement upon themselves and they have so voted. Membership in MASA is now contingent upon some form of cme credits, most likely the AMA's PRA with modifications, and following a thorough explanation of the entire program, the educational requirements will begin.

PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

General Practice—

Age 28; Indiana University 1972; Board eligible; seeking associate or group. Available July 1975. LW-1/3

Age 32; Medical College of Virginia 1969; National Board; seeking associate or emergency room practice. Available July 1974. LW-1/4

Age 47; Manila Central University 1955; Board eligible; seeking solo, associate, industrial, institutional or emergency room (pathology or general practice). Available Fall 1974 or 1975. LW-1/5

Age 31; Indiana University 1970; seeking group, institutional or emergency room practice. Available October 1974. LW-1/6

Age 30; Baroda Medical College, India, 1967; Board eligible; seeking solo, group or emergency room practice (general practice and/or radiology. Available July 1974. LW-1/7

Emergency Room or Student Health—

Age 25; University of Iowa 1973; Available July 1974. LW-2/2

Internal Medicine—

Age 37; Tulane, 1966; Board eligible; seeking solo, associate in family practice-internal medicine. LW-4/1

Age 31; Medical College of Georgia, 1968; Board eligible; seeking associate practice in North Alabama or coastal area. Available July 1975. LW-4/4

Age 33; Medical College of South Carolina, 1966; Board certified; seeking group or associate. Available September 1975. LW-4/5

Age 32; Emory University, 1968; seeking solo, associate or group practice. Available July 1975. LW-4/6

Age 45; Washington University, St. Louis, 1954; Board certified; seeking solo, associate or group

(Continued on next Page)

practice (interest in gastroenterology). Available August 1975. LW-4/7

Age 31; Albany Medical College 1969; Board certified; National Board; seeking associate, group or institutional practice. Available August-September 1974. LW-4/9

Age 45; University of Michigan 1972; National Board; seeking solo or institutional practice. LW-4/10

Orthopedics—

Age 33; Hahnemann, 1968; National Board; Board eligible; seeking associate practice. Available July 1975. LW-5/2

Ophthalmology—

Age 38; Baylor 1962; Board certified; seeking solo, associate, group, industrial, or institutional practice. Available September 1974-Jan. 1975. LW-10

Pathology—

Age 41; Ohio State University, 1959; Board certified; seeking institutional practice, clinical and/or anatomical. Available summer 1974. LW-6/2

Pediatrics—

Age 33; Seoul National University, Korea, 1965; Board eligible; seeking hospital based practice or group practice. LW-7/2

Age 31; Chicago Medical School, 1969; National Board; Board eligible; seeking associate or group practice. Available July-August 1974. LW-7/3

Radiology—

Age 58; Georgetown 1939; Board certified; seeking industrial or institutional practice. LW-11

Surgery—

Age 33; Medical College of Virginia, 1967; National Board, Board eligible, seeking associate or group (general and vascular). Available 8/74. LW-8/1

Age 59; University of Minnesota 1943; Board certified; seeking group, institutional or teaching (thoracic and cardiovascular surgery) LW-8/2

Age 34; Bowman Gray 1966; Board certified; seeking associate or group. Available August 1975. LW-8/3

Urology—

Age 33; Tulane, 1966; Board eligible; seeking associate or group practice. Available August 1974. LW-9/1

Age 32; Georgetown University, 1968; National Board; Board eligible; seeking associate, group or industrial. Available Fall 1975. LW-9/2

Physicians Wanted

General Practitioners—

Physician wanted for general practice, group or associate, in University town of 40,000 population. Salary and partnership negotiable. PW-1

General Practitioner wanted for multi-specialty group practice on Bay in South Alabama. Modern offices, near hospital. Salary with incentive available. Excellent churches, schools and recreational facilities. PW-2

Associate wanted in a three physician general practice in a rural county near Mobile. Salary initially with anticipated early partnership arrangement. 30-bed county hospital adjoining the office. PW-3

Opportunity for General Practitioner in South Alabama community with a trade area of 20,000 to 25,000 population. Modern hospital with certified surgeon, radiologist, and cardiologist on staff. Present physicians interested in partner, forming Professional Association or may enter into private practice. Free office space available, or physicians in the area interested in building new office building. Excellent school system with junior college within 15 miles. PW-4

Family physician needed as associate with well established physician in small North Alabama town. Modern, fully equipped hospital. Office space and equipment available. Salary negotiable plus other benefits. PW-5

Opportunity for young internist or family physician to join three man group in rapidly growing town of 12,000 population in Tennessee Valley. Excellent hospital. Modern well-equipped office. PW-6

Opportunity in southeast Alabama in town of 3,000 population, trade area of 15,000 population. Nearest large city, 8 miles, 40,000 population, and 2 large hospitals. Office space and housing readily available. Industrial and agricultural area. Churches, schools, civic and social activities. PW-7

Opportunity in south Alabama in town of 2,700 population, trade area of 15,000 population. Nearest large city of 30,000 population located 45 miles. Nearest hospital is 10 miles. One physician now engaged in practice in the town. Necessary arrangements will be made for office space, equipment, and housing. Industrial and agricultural area. Churches, schools, civic and social activities. PW-8

General Practitioner urgently needed for busy, active practice in rural densely populated area in Northeast Alabama. Modern fully equipped clinic with X-ray, lab facilities, four examining rooms, minor surgery, emergency room, physician's office, large twenty-patient waiting room, spacious business and records section, nurses and physicians lounge. Office personnel available. Accredited general hospital nearby. PW-8/1

Special Openings—

Wanted, internists, generalists, radiologist, orthopedist, general surgeons. Town of 15,000 population in county of 45,000 population located in Southeast Alabama. Attractive for a group setup.

(Continued on Page 737)

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(Continued from Page 730)

4. Girard, A. C.: Lister's Antiseptic Treatment of Wounds. The Medical Record. 12:721-726, Nov. 10, 1877.

5. Lister, Joseph. New Method of Treating Abscess - 1-4 of Carbolic Acid in boiled linseed oil. The Medical Record. 2:396, Oct. 15, 1867.

6. Lister, Joseph. Address in Surgery. British Medical Journal 2:225-233, Aug. 8-11, 1871.

7. Lister, Joseph. On a case illustrating the present aspect of the antiseptic system of treatment in surgery, Dec. 31, 1871.

8. Lister, Joseph. Demonstrations of antiseptic surgery before members of the British Medical Association in the Operating Theatre of the Royal Infirmary, Aug. 4-5, 1875.

9. Lister, Joseph. A demonstration in antiseptic surgery. The Dublin Journal of Medical Sciences, Series 3, 68:97-114, Aug. 1, 1879.

10. Lister, Joseph. Antiseptic Dressings. The Medical News and Library. 37:183-184, Dec. 1879.

11. Lister, Joseph. Clinical lecture illustrating antiseptic surgery, delivered in King's College Hospital. The Lancet 2:901-905, Dec. 20, 1879.

12. Lister, Joseph. Illustrations of antiseptic surgery - a clinical lecture delivered at King's College Hospital. The Medical News and Abstract. 38:72-77, Feb. 1880.

13. Lister, Joseph. Clinical Lecture illustrating antiseptic surgery. The Medical News and Abstract. 38:136-142, March, 1880.

14. On a case illustrating the present aspect of the antiseptic treatment in surgery. The collected papers of Joseph Lister, Oxford at the Clarendon Press. 2:165-198.

15. Royal College of Surgeons of Dublin conferred First Honorary Fellowships of the College on Pasteur, Huxley, J. Paget, Joseph Lister, T. S. Wells and J. Marshall on April 28, 1886.

16. Six papers by Lord Lister - with a short biography and explanatory notes by Sir R. J. Godlee. John Bale, Sons and Danielsson, LtD. London, 1921.

(Continued from Page 734)

High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-9

Opportunity for **Cardiologist** interested in hospital based practice centering around special procedures in cardiology, including cardiac catheterization, coronary arteriography, pacemaker work, preoperative and postoperative care of cardiac surgical patients in Montgomery. PW-10

General Surgeon and Ophthalmologist wanted for community of 22,000 population and 45,000 service area. New hospital with eight general practitioners and one Board certified radiologist. Schools for blind and deaf located in the town. Excellent schools and recreational facilities. PW-11

(Continued from Page 722)

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Price, Cecil Eugene, Evergreen, Alabama, Deceased 4/29/74

Jefferson County

de la Garza, William, Birmingham, Alabama, Deceased 12/7/73

Miller, Robert Edward, Birmingham, Alabama, Deceased

Seibold, James L., Birmingham, Alabama, Deceased

Lowndes County

Staggers, William Llewellyn, Benton, Alabama, Deceased 3/2/74

Mobile County

Taylor, James Leslie, Mobile, Alabama, Deceased 1/1/74

Montgomery County

Cobbs, Beverly Woodfin, Montgomery, Alabama, Deceased 3/6/74

Jackson, Benjamin Franklin, Sr., Montgomery, Alabama, Deceased 5/5/74

Willis, Charles Alfred, Montgomery, Alabama, Deceased 2/24/74

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Practical Aspects In The Utilization Of Commonly Used Antiarrhythmic Drugs

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American Heart Association

By way of introduction, we are well served by emphasizing some general guide lines to therapy: First, treat the patient not just the arrhythmia. Second, the choice of treatment should be dictated by the present and predicted general condition of the patient. Third, if therapy is indicated, then the choice of therapy should be influenced by a) the specific arrhythmia, b) the hemodynamic consequences of the arrhythmia, c) the clinical setting (for example, digitalis intoxication), d) the rapidity of onset of action required, e) the potential untoward effects of the drug, f) the ease and speed of administration of the drug, g) the mechanism of action of the drug, h) the anticipated relative effectiveness of the drug.

After a drug is selected to treat a cardiac arrhythmia, it should be carefully administered, especially with regard to dosage and dosage intervals (see below). Therapeutic efficacy of the drug should be evaluated only after it has received an appropriate clinical trial. In this regard, it is useful to obtain the plasma concentration of the drug in order to determine whether the desirable therapeutic range has been achieved (see below). Should the drug initially selected prove ineffective, its administration should be terminated and therapy with another drug should be initiated. If attempts at therapy with one drug at a time in appropriate intervals has proven ineffective, combined drug therapy may then be tried. While considerable progress has been made in understanding the cardiac actions of the commonly used antiarrhythmic agents, there is insufficient information about their effect when used in combinations. The actions on cardiac tissue of procaine amide (pronestyl) and quinidine should be considered as essentially identical (1, 2, 3). The actions of diphenylhydantoin (dilantin) on cardiac tissues are considerably different and in some ways opposite to those of procaine amide and quinidine (1, 2, 3). Until recently, lidocaine (xylocaine) was thought to have effects on cardiac tissue largely similar to those of diphenylhydantoin but it now appears that lidocaine has some action similar to those of procaine amide and quinidine as well (3). Propanolol has actions on cardiac tissue primarily like those of quinidine and procaine amide but in some respects has actions similar to diphenylhy-

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dantoin and lidocaine (1, 2, 3). Because of the different actions on cardiac tissue of these drugs, it should be anticipated that combination drug therapy in the treatment of arrhythmias may produce desirable (complementary or synergistic) effects, undesirable (antagonistic) effects, or indifferent effects. Unfortunately, at this time there is no reliable body of information to guide the physician in the use of drug combinations, and as should be apparent, treatment of cardiac arrhythmias with combinations of antiarrhythmic agents therefore is largely empirical.

The most commonly used antiarrhythmic agents are quinidine, procaine amide, lidocaine, diphenylhydantoin (DPH), and propanolol. A detailed review of the pharmacology and use of these antiarrhythmic agents is beyond the scope of this review. The reader is referred to several standard references (1, 2) which deal in detail with this subject. However, below are listed some generalizations about the use of these drugs and some suggestions about their administration.

Quinidine (1, 2, 3, 4)

Quinidine is quite a useful antiarrhythmic agent. It is recommended that it be administered solely by the oral route. When given parenterally, particularly intravenously, it often produces profound hypotension. Usually for adults, 300-400 mg of quinidine sulphate every six hours is an adequate regimen to obtain a therapeutically effective plasma level. The effective plasma concentration is 2.5-8 mg/liter. The drug may be therapeutically ineffective when the plasma concentration is at the lower end of the therapeutic range. Above the level of 8.0 mg/liter, there is a predictable incidence of quinidine toxicity which manifests itself largely as cardiac arrhythmias. Since quinidine toxicity can produce many of the arrhythmias for which treatment with this drug has been initiated, it is recommended that arrhythmias which persist during quinidine administration or which appear late following quinidine administration be considered a potential manifestation of quinidine toxicity. In such circumstances, quinidine plasma levels should be obtained. Since the plasma half-life of quinidine is about 6-7 hours, it will take about 1-1/2 to 2 days to obtain a steady-state plasma concentration following chronic oral administration of this drug. This becomes especially important in manipulating the dosage of the drug to control arrhythmias. It is recommended that the dosage of the drug not be adjusted until the drug has been given a trial at the originally selected dose for at least two days, unless there are clear and compelling reasons for doing so. Similarly, it is recommended that the plasma concentration not be obtained for at least 36-48 hours following the onset of a chronic oral administration of this drug, unless one is considering the possibility of quinidine toxicity. Lastly, as 20-50 per cent of this drug is excreted in an unmetabolized form by the kidneys, care must be taken to adjust the dosage of this drug in the presence of renal disease.

Procaine Amide (1, 2, 3, 4)

In terms of its action on cardiac tissues, procaine amide should be considered as identical to quinidine. One advantage of procaine amide over quinidine is that it can be used parenterally, as well as orally. The drug is best given every 3-4 hours in order to maintain a therapeutic plasma concentration. For adults, the usual oral or intramuscular dose is 500 mg. every 3-4 hours. For intravenous administration, 100 mg. may initially be given **slowly** every five minutes up to a total of 1 gram. For maintenance of intravenous administration of this drug, 20-80 ug/kg/min (1.5-5.0 mg/min) may be given. The effective plasma concentration of this drug is 5-10 mg/liter. Plasma levels above 10 mg/liter are associated with a significant incidence of toxicity, largely manifested as arrhythmia. Because the half-life of this drug is 2-3 hours, it should be anticipated that following chronic oral administration of the drug, a steady-state plasma concentration will not be reached for 18-24 hours. Thus, as in the case of quinidine, adjustment of

all doses of this drug should be made following at least 18-24 hour trial on the initial dosage, unless there are clear and compelling reasons for so doing. As 50-60 per cent of this drug is excreted in the kidneys in an unmetabolized form, this drug should be given with great care, if at all, in the presence of renal decompensation.

Lidocaine (1, 2, 3, 4)

Lidocaine is quite a useful drug, but a disadvantage is that it can only be used parenterally, and almost exclusively intravenously. After an initial intravenous injection of 1 mg/kg every 3-5 minutes if necessary, to a total dose (in adults) of 200-300 mg., a constant intravenous infusion of 20-50 ug/kg/min should be administered. Doses lower than 20 ug/kg/min are most often ineffective and doses higher than 50 ug/kg/min may lead to drowsiness, confusion, and seizures. Also, when a patient has been receiving a constant intravenous infusion of lidocaine for several hours, additional **large** intravenous injections of lidocaine are contraindicated because of the danger of elevating the blood lidocaine concentration to a level which, though transient, will produce seizures. Additional **small** intravenous injections, generally 10-25 mg. in adults, may be given carefully if required. Also, since it takes about six hours to achieve a constant blood level following the initiation of a constant intravenous infusion, small additional injections may be required in the early period following initiation of this therapy. It is a fortunate coincidence that a reasonably accurate estimate of the steady-state plasma concentration of lidocaine can be calculated by dividing the amount of drug infused each minute by a factor of 10. Thus, an infusion rate of 35 ug/kg/min would produce a steady-state of 3.5 ug/ml of plasma. Since the usual therapeutic range of plasma concentrations of lidocaine is 2-5 ug/ml of plasma, one can then quite easily determine with acceptable accuracy the desired plasma concentration of lidocaine. Since lidocaine is primarily metabolized by the liver, this drug must be given carefully in the presence of any degree of hepatic failure. For instance, in the presence of severe right-sided congestive heart failure with congestion of the liver, usually appropriate doses of lidocaine may result in higher plasma levels than clinically desirable. Therefore, when administering the drug to patients under these circumstances the appearance of drowsiness or confusion despite ostensibly appropriate dosage should be viewed as a manifestation of toxicity to lidocaine. Finally, lidocaine is generally ineffective in the treatment of supraventricular arrhythmias except when they are secondary to digitalis toxicity.

Diphenylhydantoin (1, 2, 3, 4)

Diphenylhydantoin is a drug whose usefulness is underappreciated. When used with patience (it may require several days of oral medication to achieve a desirable therapeutic blood level), it has an important place in treatment of arrhythmias. This drug can be given intravenously initially, but because of the very alkaline pH of the diluent (pH$<$11), a constant intravenous infusion should not be attempted. The usual oral dose is 100 mg. four times daily, although some patients may require more. A suggested regimen for rapidly achieving therapeutic blood levels is to administer 1 gram in divided doses the first day, 600 mg. in divided doses the second day, and then 100 mg. four times daily thereafter. For any given dosage schedule, it usually takes a minimum of 48 hours to achieve a constant therapeutic blood level, but it should be anticipated that it may take 6-7 days of chronic oral administration, since the kinetics of this drug are not first order. The effective plasma concentration is 10-18 ug/ml. This drug is primarily metabolized by the liver, and therefore in the presence of liver decompensation, diphenylhydantoin should be used cautiously or not at all. Diphenylhydantoin like lidocaine is generally ineffective in the treatment of supraventricular arrhythmias except when they are secondary to digitalis toxicity.

Propanolol (1, 2, 3, 4)

Propanolol is rarely a drug of first choice in the treatment of cardiac arrhythmias. It

may be used as a drug of choice in the treatment of arrhythmias which are clearly catecholamine induced such as arrhythmias secondary to pheochromocytoma or arrhythmias related to exercise. Generally, propanolol's only use is to slow the ventricular response to rapid atrial arrhythmias which are refractory to the usual forms of treatment and in which there is a very rapid ventricular response despite adequate digitalis therapy. In such instances, propanolol is administered to prolong A-V conduction and the A-V refractory period. This increases A-V block and thereby slows the ventricular response. Propanolol may be given orally or parenterally. It is usually given every 4-6 hours. For the treatment of arrhythmias, the total oral daily dose varies between 10-100 mg. When administered intravenously, 1 mg/min to a total dose of 5 mg. is an acceptable regimen. The effective therapeutic plasma concentration for treatment of arrhythmias with this drug is not known. The drug is primarily metabolized by the liver.

Summary

This brief review has attempted to highlight some salient features regarding the treatment of cardiac arrhythmias with five commonly used antiarrhythmic agents. Undoubtedly, in time, we will learn more about these drugs when they are used either alone or in combination. And too, we should anticipate that effective new antiarrhythmic agents will be discovered. Thus, some of the current notions regarding drug therapy of cardiac arrhythmias may change. In the meantime, this review should serve as a useful guide for the practical utilization of antiarrhythmic agents.

References:

1. Hoffman, B. F. and Bigger, J. T., Jr.: Antiarrhythmic drugs. In: *Drill's Pharmacology in Medicine*, (Di Palma, J. R., ed.), fourth edition New York, McGraw-Hill Book Company, pp. 824-852, 1971.

2. Moe, G. K. and Abildskov, J. A.: Antiarrhythmic drugs. In: *The Pharmacological Basis for Therapeutics*, fourth edition (Goodman, L. S. and Gilman, A., eds.) New York, The MacMillan Company, pp. 709-729, 1970.

3. Singh, B. N. and Hauswirth, O.: Comparative mechanisms of action of antiarrhythmic drugs. American Heart Journal, 87:367-382, 1974.

4. Waldo, A. L. and Kaiser, G. A.: Electrophysiological consideration for the cardiac surgical patient. In: *Preoperative, Operative and Postoperative Care of the Cardiac Surgical Patient.* (Litwak, R. S., Jurado, R. A. and Lukban, S. B., eds.), Intercontinental Medical Book Corp., New York, In Press.

5. Bassan, M. M., Weinstein, S. R., and Mandel, W. J.: Use of lidocaine by continuous infusion. American Heart Journal, 87:302-303, 1974.

Management Of Herpes Zoster With H-Influenza Vaccine, A Preliminary Report

Andrew M. Brown, M. D.
Gadsden, Alabama

This is a preliminary report of five consecutive cases where Herpes Zoster was managed successfully by H-influenza provocative neutralization technique.

Zoster (Gr., girdle), also called shingles (a distortion of the mediaeval Latin cingulus, a girdle), has been known since ancient times. The virus causing varicella and zoster are thought to be one and the same. This is based on electron microscopy (EM) and immunofluorescence (FA) techniques and virus antigen studies. The antigen response to zoster and varicella appear to be identical; however, several different types of antigens are produced in each. Both produce precipitating complement fixing (CF), fluorescent (FA), and neutralizing antigens. The disease tends to be most severe in persons with depressed

cell mediated immune responses due to natural causes such as Hodgkin's Disease and in patients on immunosuppressive drugs.

Treatment has been effective with idoxuridine, cytarabine, and, to a lesser degree, with adenosine arabinoside. Idoxuridine's package insert states it "is indicated only in the treatment of herpes simplex keratitis." It, however, has been applied topically on segmental lesions with good results. Nevertheless. the amount required to saturate lint compresses would tend to be very expensive. Cytarabine is limited to "only physicians experienced in cancer chemotherapy." It further states that "For induction therapy, patients should be hospitalized in a facility with laboratory and supportive resources sufficient to monitor drug tolerance and protect and maintain a patient compromised by drug toxicity."

I would like to propose a relatively simple method which has effectively been used in five successive cases. It employs the use of influenza vaccine. In these cases, Influenza Virus Vaccine-Bivalent, Type A and B, which was filtered and zonal centerfuge purified, was used. (As long as the government standards are met, it probably makes little difference which brand is used.)

Method: One to five dilutions of influenza vaccine and buffered saline were prepared as follows:

♯1	1:5	1 cc Influenza Vaccine	4 cc Buffered Saline
♯2	1:25	1 cc ♯1 Solution	4 cc Buffered Saline
♯3	1:125	1 cc ♯2 Solution	4 cc Buffered Saline
♯4	1:625	1 cc ♯3 Solution	4 cc Buffered Saline

A time interval of 20 minutes between injections was allowed for amelioration of signs or symptoms such as redness or pain. If no relief was achieved, the next weaker dilution was used (1:5, 1:25, 1:125, 1:625, etc.). For greater accuracy, 0.5 cc of the neutralizing dilution of influenza vaccine was mixed with 4.0 cc of saline and 10 vials containing 0.5 cc were provided to the patient. Example: If the patient neutralized on ♯3 dilution, .5 cc of ♯3 was mixed with 4.5 cc of saline and 0.5 cc placed into ten 1 cc vials. This resulted in 0.05 cc of the ♯3 solution being given with each injection. The 0.45 cc of added saline merely increased the convenience and diminished the margin of error.

Case 1, which was the most dramatic, involved the right supra-orbital nerve. The patient, a 63-year old white male, had had the problem for six days and was in intense pain at the time of his first office visit on August 17, 1973. Vesicular lesions in the distribution of the right supra-orbital nerve were present. There was marked erythema about the region. Using 1:5 dilutions of the influenza vaccine and beginning with a 1:5 dilution, 0.05 cc was administered intradermally. By the third dilution, which was a 1:125 dilution, the reddened area in the forehead began to clear and he no longer noted any pain on his forehead. He was given the neutralizing dose in individual vials and was told to take an additional injection whenever the symptoms returned or to take at least one vial per day. It was suggested that he empirically take one vial b. i. d. the first three days and then one a day after that unless conditions warranted more frequent dosing. When he was seen in the office one week later, he was asymptomatic. The lesions dried up, leaving obvious scars, but there has been no post herpetic sequela such as pain or anesthesia.

The second, third, fourth, and fifth cases each had typical manifestations of Herpes Zoster, with cutaneous lesions and the concomitant painful sensations. In each case, the lesions had been present for several days prior to being seen and had reached the vesicular stage. In each case, the patient was neutralized, as far as the pain was concerned, while in the office. The erythema also diminished at the time of the neutralization. During the weeks that followed, these patients experienced virtually none of the painful sequela one would normally encounter. The test procedure took approximately one hour to perform. In each case, the results were rather dramatic.

At this time, no attempt is made to explain the basis for this reaction, but merely to state that it has worked in five successive cases. The general principals developed by Lee (1-5) and delineated by Miller (6) were used. Considering the frequency of H-zoster (Records from two general practices in the United Kingdom suggest that at least 20 per cent of adults suffer from zoster at some time, but seldom on more than one occasion.) (7), and the derth of reports of successful attempts to manage this disease, this particular mode of treatment bears further consideration. The other drugs available to treat this disease are either experimental and are not available or they are not yet cleared for this usage.

The five cases seen were clinically obvious cases of H-zoster. Nevertheless, in the future, I would advocate some of the following tests to confirm the diagnosis: Immuno-electro-osmophoresis for antigen, Complement fixation for antigen, and Immunofluorescence for antigen, or serology for antibody test. (The immuno-electroosmorphoresis for antigen is still in the experimental phase and is not available for clinical purposes. The complement fixation test for antigen is not reliable and the immunofluorescence method for diagnosis is still in a research phase and is not feasible for clinical use. Neutralization tests are probably too expensive for clinical use; however, the Birmingham office of the State Health Department will be glad to do virus isolation studies for diagnosis. They suggest the following procedure be used. An intact vesicle and the surrounding skin is cleaned with alcohol and allowed to dry. Do not use soap or detergents since they tend to kill the virus. Allow the area to dry thoroughly. Open the vesicle with a sterile scalpel. Swab the vesicle and especially the base with a dry cotton tip sterile swab, being sure to pick up some of the basal cells. The swab is then frozen or refrigerated and delivered to the laboratory in Birmingham in a frozen or refrigerated state.)

There is considerable need for a larger series with follow-up to fully evaluate the feasibility of this mode of therapy. At this point in time, I am appealing to other physicians to submit case histories or patients for study which would be considered as statistically significant. There is also the potential use of such a method in minimizing the clinical course of varicella. It, too, should be ameliorated by the same mode of therapy. Heretofore, the potential toxicity has precluded cytotoxic and DNA inhibitory drugs for this childhood disease.

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BIBLIOGRAPHY

1. Lee, C. H.: A New Test for Diagnosis and Treatment of Food Allergies. Buchanan County Medical Bulletin 25:9 (January) 1961.

2. Lee, C. H. and Rinkel, H. J.: Transactions, American Society Otolaryngology and Ophthalmology 3:1-70 (November) 1962.

3. Lee, C. H.: Material presented at the Postgraduate Course in Allergy, Jackson, Wyoming, (June) 1964.

4. Lee, C. H., Williams, R. I., and Binkley, E. L.: Provocative Testing and Treatment for Foods. Archives of Otolaryngology Volume 90 (July) 1969.

5. Lee, C. H., Williams, R. I., Binkley, E. L.: Provocative Inhalant Testing and Treatment. Archives of Otolaryngology Volume 90 (August) 1969.

6. Miller, J. B., Lee, C. H., Binkley, E. L., Hardt, S. M.: Relief of Influenza Symptoms by the Provocative Neutralizing Method, A Preliminary Report. The Journal of The Medical Association of The State of Alabama Volume 41, (January) 1972.

7. Tomlinson, A. H. and MacCallum, F. O.: The Incidence of Complement Fixing Antibodies to Varicella-zoster Virus in Hospital Patients and Blood Donors. J. Hyg (Camb.), 68, 411, 1970.

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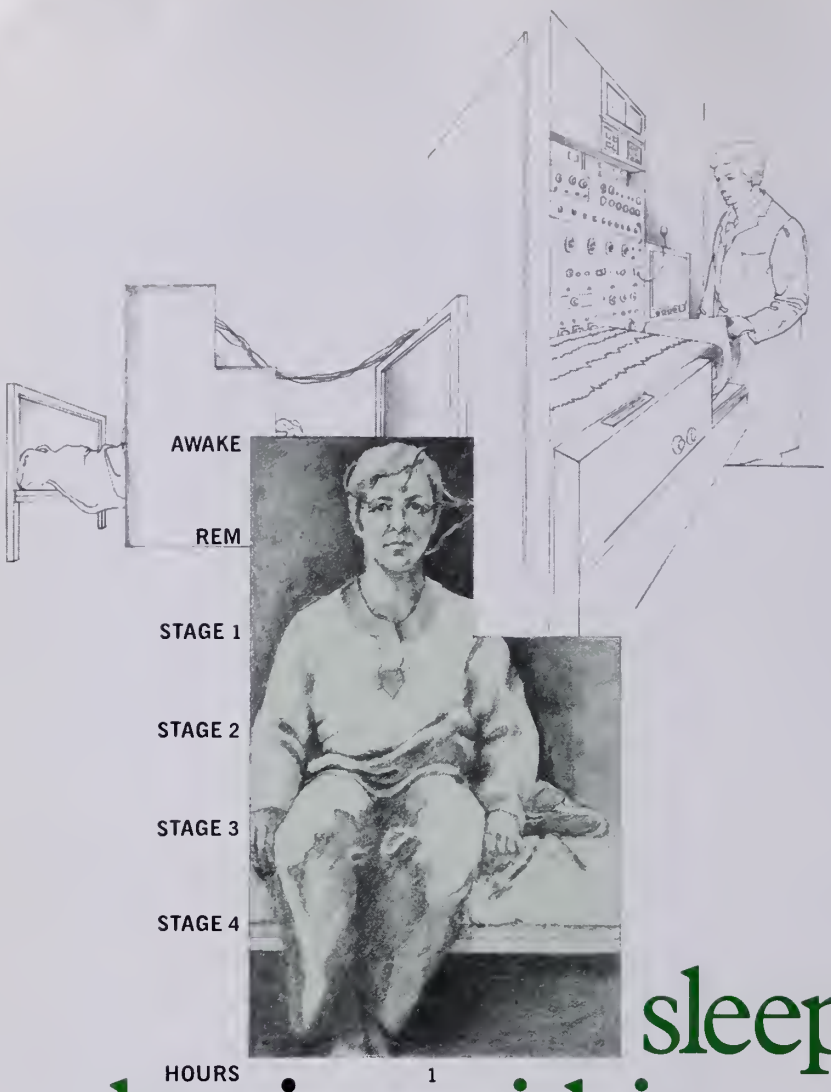

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Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.
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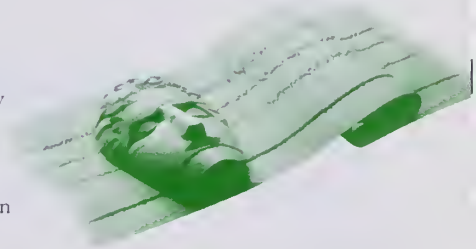

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REFERENCES: 1. Kales A, *et al*: *Arch Gen Psychiatry 23*:226-232, Sep 1970
2. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
3. Frost JD Jr: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
4. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
5. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ

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Opinion & Dialogue

Is there a need for a drug compendium?

A drug compendium of the type I envision would fill a definite need for the practicing physician. Such a compendium would give him all the information necessary for using a drug intelligently, and it would do so in a clear, concise, convenient, objective and balanced fashion.

What a Compendium Should Contain

I believe the compendium should inform the doctor what a drug will do, when he should use it for what type of patient, for how long, in what dose, what benefits his patient is likely to obtain, the risks involved, and cross-reactions with other drugs.

The information would be based on the package insert and have the same legal status. In fact a complete compendium with com plete and current information might even eliminate the necessit

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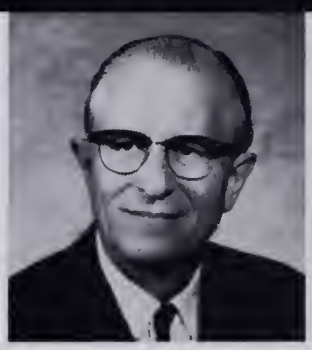

A drug compendium, or preferably compendia, should, I believe, be private, not federal, in sponsorship. They should contain comprehensive listings of drugs available for prescribing. They should be single, legibly printed volumes of reasonable size, updated quarterly or semiannually and completely revised every yea

Function of a Compendium

A compendium should furnish the following information on drugs in the following order: indic tions for use, side effects, advers drug reactions, contraindications drug interactions, drug dosage a the dosage forms marketed. Dru prices should not be included because they vary so widely and change rapidly.

No compendium should set forth drugs of choice or discuss relative efficacy. Such questions must be left for the practicing ph sician to decide, whether on the basis of the medical literature, h own clinical experience, advice c colleagues, information supplie by manufacturers, and so on.

Nor should a compendium undertake to educate the doctor how to use drugs. Rather, it mus be a reference source designed p marily to refresh his memory as drugs he may not use regularly.

or a package insert in many instances. This would constitute a substantial saving for the manufacturer.

By a complete compendium, I do not mean a volume of prohibitive size. You don't need a book describing 25,000 products with an enormous amount of repetition. Rather, drugs should be arranged by class. Mutually applicable information would be provided, along with brief discussions pinpointing differences in specific drugs of that class. Listings would be cross-indexed in a useful way.

Other Available Documents as Sources of Information

Existing references such as PDR and the AMA Drug Evaluation are obviously useful but they are incomplete. Either they are not cross-referenced by generic name and do not group drugs with similar characteristics, or they do not list all the available and legally marketed drugs. And some of those omitted may be very useful. On the other hand, drugs made by more than one supplier, tetracycline for example, may be fully described a dozen times in the same book.

While perhaps PDR could be rearranged and cross-indexed with generics included, and while the AMA Drug Evaluation might also be modified and expanded, I am not sure that the end result would have all the attributes required for a useful compendium. At the same time, you would run the risk of amassing a voluminous and unwieldy tome.

Should Editorial Comments Accompany the Listings?

Subjective judgments, in my opinion, have no place in a compendium. However, if there is substantial evidence based on a sound body of science concerning relative efficacy of several drugs, certainly that information should be included. The committee of experts compiling and editing a particular section would also have to assess and indicate instances where a meaningful difference between drugs is pertinent.

Sponsorship, Compilation and Editing

Producing a book like this would undoubtedly be difficult and demanding. It would obviously take a great deal of talent and expertise, and would require a varied and experienced group, ranging from writers and editors to highly skilled clinicians and pharmacologists. Style, format and clarity of language would play an important part in determining the usefulness of the book. And it should be updated periodically and completely revised annually.

I have no opinion whether the government or the private sector should sponsor and/or finance the compendium. What is most important is that the compendium be an authoritative, objective and useful source of information for the doctor to have at hand as a ready reference.

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should in no way imply control over the practitioner's prerogatives.

Why Another Compendium?

A practicable, single-volume compendium cannot, nor is it necessary to, include all drugs on the market today. From my practice of internal medicine for some 15 years, my experience as a consultant, and as a faculty member of four or five medical schools, I would estimate that a doctor uses only 30 to 35 drugs regularly. The 1972 Physicians' Desk Reference, incidentally, contained about 2,500 entries.

As to whether there should be a federal compendium, in my opinion, as stated earlier, the answer is easy—there should *not* be one. The proposal assumes that existing compendia are inadequate. We're not sure of that at all. Whatever its imperfections, the present drug information system in the U.S. is open, multifaceted, pluralistic and extensive. Good compendia exist, as well as other ample sources on drug therapy, ranging from journal literature through AMA Drug Evaluation to company materials. Not all physicians may use such sources as often or as well as they should, but that is the fault of the man, not of the sources.

In any event, rather than produce another book, it makes much more sense to work on improving existing compendia, and perhaps they could, as knowledge advances, include more accumulated clinical data and experience, and more information on drug interactions and adverse reactions.

Implications of a Federal Compendium

Take a hard look at the implications of a federal compendium. It would have the force of law, virtually dictating what drugs to use and how to use them. In effect, it would be a regulatory document with legal or quasi-legal status, posing medical/legal problems similar to those the doctor may now encounter if and when he departs from the provisions of the package insert. A compendium under federal aegis would tend to restrict decisions on drug therapy to one orthodox level—a most dangerous trend for medicine.

New Compendium—A Medical Option

I detect no ground swell of initiative or support whatsoever for a federal compendium—or, for that matter, for a new compendium of any type. A 1969 PMA survey conducted by Opinion Research Corporation found that only 15 per cent of those physicians interviewed felt a new compendium was needed. And a large majority did not favor the involvement of the federal government if one were to be created, preferring instead a nongovernmental consortium.

Even if we come to a time when the medical profession itself opts for a new kind of compendium, it should be handled and financed, ideally, outside both government and industry. Final review and editorial authority could be delegated, say, to specialty bodies and medical societies—but above all, *not* the government.

Surely the health care system in the United States has far more vital matters to consider than the extensive cost and effort that would have to go into the preparation and maintenance of a new, monolithic compendium, and especially one bearing the imprimatur of the federal government.

Opinion & Dialogue

What is your opinion, doctor? We would welcome your comments.

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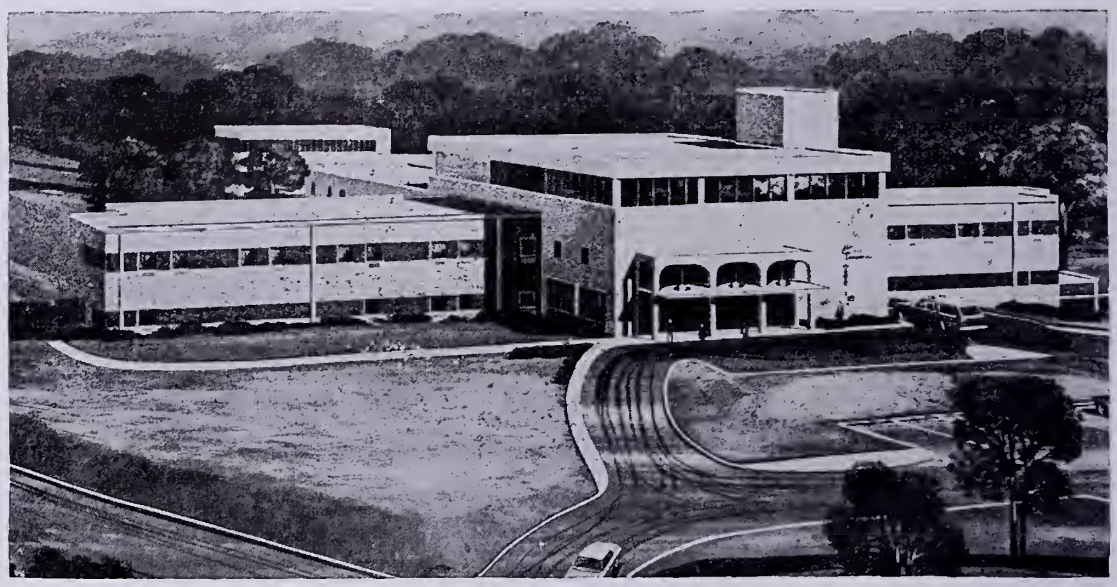

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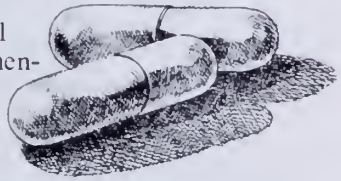

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Levy, David, present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

Little, Samuel C., present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Lohmann, Herman Josef, present Birmingham to 3100 Lorna Rd., Suite 100, Birmingham, Alabama 35226.

Luna, Rodrigo F., present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

McCallum, Charles A., Jr., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

McDowell, Holt A., Jr., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Mesel, Emmanuel, present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Meyer, Richard D., present Birmingham to 2135 S. 15th Avenue, Birmingham, Alabama 35205.

Moore, Elbert L., Birmingham to 3704 Valley Rd., Fairfield, Alabama 35064.

Mowry, Robert W., present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Oberman, Albert, present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Oget, Solmaz, present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Oh, Shin J., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Palmisano, Paul A., present Birmingham to 1601 S. 6th Ave., Birmingham, Alabama 35233.

Perry, Stephen R., present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Pitts, William R., present Birmingham to 800 Montclair Rd., Suite 510, Birmingham, Alabama 35213.

Poole, William L., Jr., Birmingham to 2045 Brookwood, Medical Center Dr., Homewood, Alabama 35209.

Poole, William L., Birmingham to 2045 Brookwood, Medical Center Dr., Homewood, Alabama 35209.

Rackley, Charles E., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Riederer, Robert E., present Birmingham to 370 Laredo Dr., Birmingham, Alabama 35226.

Ritchey, Hardin M., present Birmingham to 7901 First Ave., South, Birmingham, Alabama 35206.

Roitman, David, present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Russell, Richard O., Jr., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Salter, Merle M., present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

Schnaper, Harold W., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Shingleton, Hugh M., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Soto, Benigno, present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

Spencer, Joseph Terrell, present Birmingham to 3804 Arundel Dr., Birmingham, Alabama 35243.

Staats, Okey James, present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Stewart, Vera B., present Birmingham to 211 Wooland Drive, Birmingham, Alabama 35209.

Stroud, Robert M., present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Vitek, Jiri J., present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

Waldo, Albert L., present Birmingham to U A B—University Station, Birmingham, Alabama 35294.

Williams, Samuel D., present Birmingham to 1700 S. 7th St., Birmingham, Alabama 35211.

Wilson, George N., present Bessemer to 1623 4th Avenue, Bessemer, Alabama 35020.

Witten, David M., present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

Woodall, William C., present Birmingham to 909 S. 18th St., Birmingham, Alabama 35205.

Yelton, Chestley L., present Birmingham to 619 S. 19th St., Birmingham, Alabama 35233.

Younger, John B., Sr., present Birmingham to UAB—University Station, Birmingham, Alabama 35294.

Madison County

Bramm, Horace G., Jr., present Huntsville to 600 St. Clair Avenue, Huntsville, Alabama 35801.

Freeze, James Monroe, present Huntsville to 216 Sivley Rd., S. W., Huntsville, Alabama 35801.

Hyatt, Arthur J., present Huntsville to 1011 Mira Vesta Dr., Huntsville, Alabama 35802.

Mize, Edward G., present Huntsville to 911 Tascosa Dr., Huntsville, Alabama 35802.

Rice, Richard E., present Huntsville to 600 St. Clair Avenue, Huntsville, Alabama 35801.

Shook, Burton S., Sr., present Huntsville to 5614 Whitesburg Dr., S., Huntsville, Alabama 35802.

Whitaker, James E., present Huntsville to 141 Noble Dr., Huntsville, Alabama 35801.

Willice, Robert L., present Huntsville to 600 St. Clair Ave., Huntsville, Alabama 35801.

Marion County

Kerr, John M., II, present Hamilton to Rt. 1, Hamilton, Alabama 35570.

Sasser, Ramon C., present Hamilton to Rt. 1, Hamilton, Alabama 35570.

Weathers, Bobby W., present Winfield to Box 689, Winfield, Alabama 35594.

Marshall County

Johnston, Flemon C., Jr., present Guntersville to Rt. 6, Buck Island, Guntersville, Alabama 35976.

Mobile County

Armbrester, Charles R., present Saraland to 231 C Shelton Beach Rd., Saraland, Alabama 36571.

DeBakey, Ernest G., present Mobile to 241 Cox St., Mobile, Alabama 36604.

Montgomery County

Foster, Paul S., Montgomery to 207 E. Hart Avenue, Opp, Alabama 36467.

Parker, Robert, present Montgomery to 2118 Campbell Rd., Montgomery, Alabama 36111.

Pickens County

Douglas, George C., present Reform to 615 1st Avenue, N. W., P. O. Box G., Reform, Alabama 35481.

Talladega County

Bliss, Richard F., present Talladega to P. O. Box 1012, Talladega, Alabama 35160.

Tuscaloosa County

Nelson, John H., present Tuscaloosa to Riverside Medical Center, Suite E-3, Tuscaloosa, Alabama 35401.

Walker County

Hudson, Alcus R., present Jasper to 1800 B'ham. Avenue, Jasper, Alabama 35501.

Noguera, John F., present Quinton to Rt. 2, Box 57-B, Quinton, Alabama 35130.

Scarbrough, Daniel M., present Jasper to 706 12th St., Jasper, Alabama 35501.

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Battles, William M., Jr., Calhoun 237-6717

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(Continued on Page 771)

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Thoughts On Medical Malpractice

Clifford Emond, Jr.
Birmingham, Alabama

In 1966, I had been practicing law for 16 years. During that period of time, I handled, with my father, one medical malpractice case. My father, who had been engaged in trial practice since the middle 1920's, to the best of my knowledge had never previously handled such an action. Other than this one malpractice case, I cannot recall even discussing a potential malpractice claim with a client. Not only in Jefferson County, but over the state of Alabama, such claims were practically nonexistent.

In 1966, we tried the case of Orange v. Birmingham Baptist Hospital, et al., and the jury returned a verdict in the amount of $600,000.00. Without question, this verdict and its attending publicity stirred the interest of both the public and the legal profession in the malpractice area, and brought for the next three to four years what might be termed a trickle of potential claims to our office. However, in no way, as I hope to point out, can the present outburst of malpractice claims be attributed to the verdict in the Orange case or its publicity. From 1966 to 1970, it would have been exceptional if our office handled more than ten potential malpractice claims a year. Astoundingly, in 1970 this number rose to approximately one per week, and has continued upward to the point that we now average interviewing three to five potential claimants a week. One week this past March, we interviewed ten.

There are many reasons for this turnabout in the public's attitude toward the medical profession. However, in my judgment the basic reasons are twofold, and it is the latter that brings 75 per cent to 90 per cent of potential claimants to our office.

1. A bad result which means extra pain and suffering for the patient, combined with—
2. Bad "bedside manners" on the part of the doctor and/or his office staff—

   The doctor did not properly explain beforehand the procedure to be taken.

   The doctor refuses to discuss what is obviously a bad result with the patient or the patient's family.

   After the doctor's refusal to discuss an obviously bad result, the patient refuses to pay the doctor's bill. The doctor then places the bill in the hands of a lawyer or collection agency.

   In correcting a bad result caused by his mistake, the doctor bills the patient for the second procedure.—I have seen many occasions when this bill was more than the cost of the initial treatment.

   The doctor refuses to take the patient's complaints seriously.—How many times have I heard a client with an obviously legitimate claim say, "The doctor says it's all in my head."

   The patient with a bad result is handled with anything but a pleasant manner by the doctor's staff when he tries to contact the doctor by telephone.

Those are a few of the best examples why your patients become our clients.

Of course, there are other reasons for the recent increase in malpractice claims in Alabama and throughout the country. Patients have more medical knowledge and are more

medically sophisticated these days. They no longer accept "Take two aspirin and call me Monday" as the universal "cure all".

Gone are the days of the family doctor who ministered to the ills of a family throughout life. Today, when a person becomes ill or is injured, he presents himself to the nearest hospital where a platoon of doctors and technicians take charge of his body plumbing. Even if admitted by a family doctor, that old friend soon appears to get lost in the shuffle of medical personnel.

The patient is examined by residents and interns, a specialist is called in, he requires samples from the patient's body to be examined by other specialists in hematology and pathology, another doctor interprets his x-ray film. If an operation is required, perhaps as many as three anesthesiologists become involved; the first takes the patient's history, the second starts the anesthesia, and the third relieves the second during the operation. The operation is performed by a surgeon assisted by a resident surgeon.

Obviously in such a situation little if any rapport is developed between the patient and the treating doctors. The patient has paid a great deal of money to a group of virtual strangers for his body repairs, and if the job is not done correctly, and an explanation is not forthcoming or is inadequate then he turns to the legal profession to find the reason.

I continually stress to doctors that the vast majority of the public will go out of their way not to make a claim against a doctor If there is patient-physician rapport the majority of patients will "tough-out" the pain suffering, and expense of a bad result. But if the rapport is lacking initially or erodes during the course of treatment or afterwards a malpractice claim is likely to follow.

Though not dealing directly with the subject of this article, I believe a recent Alabama Supreme Court decision will be of interest to you. The following is a review of that case.

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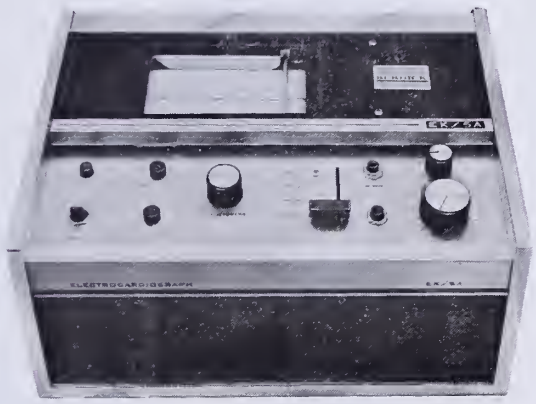

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between a doctor and his patient, the Alabama Supreme Court holding that a confidential relationship between a doctor and his patient did *not* exist as a matter of law. A ruling by the court in the case of Horne v. Patton, 287 So. 2d 824 (Dec. 1973) changes this.

Briefly, the case arose out of a disclosure by the defendant doctor to plaintiff's employer of certain information acquired in the course of a doctor-patient relationship between the plaintiff and the defendant doctor. Such disclosure was contrary to the expressed instructions of the plaintiff. Plaintiff's complaint was stated in three counts, (1) breach of a confidential relationship; (2) breach of an implied contract; and (3) wrongful invasion of privacy. The court held all counts to be good.

This case was of particular interest to me. On several occasions in handling malpractice cases, I have discovered that a doctor who treated the plaintiff subsequent to the alleged malpractice has freely discussed the plaintiff's condition and other aspects of the case not only with the defendant doctor but also with defendant's attorney. Such discussion was without any authorization from the plaintiff or from me. In fact on one occasion, having discussed plaintiff's case with the defendant doctor and attorney with no authorization, the doctor later refused to talk to me unless I produced a written authorization. In this regard, our court quotes from a Pennsylvania Appellate decision:

> " * * * We are of the opinion that members of a profession, especially the medical profession, stand in a confidential or fiduciary capacity as to their patients. They owe their patients more than just medical care for which payment is exacted; there is a duty of total care; that includes and comprehends a duty to aid the plaintiff in litigation, to render reports when necessary, and to attend court when needed. That further includes a duty to refuse affirmative assistance to the patient's antagonist in litigation. The doctor, of course, owes a duty to conscience to speak the truth; he need, however, speak only at the proper time." (underscoring supplied)

Further, from an Ohio Federal Court case:

> "When a patient seeks out a doctor and retains him, he must admit him to the most private part of the material domain of man. Nothing material is more important or more intimate to man than the health of his mind and body. Since a layman is unfamiliar with the road to recovery, he cannot sift the circumstances of his life and habits to determine what is information pertinent to his health. As a consequence, he must disclose all information in his consultations with his doctor—even that which is embarrassing, disgraceful or incriminating. To promote full disclosure, the medical profession extends the promise of secrecy referred to above. The candor which this promise elicits is necessary to the effective pursuit of health; there can be no reticence, no reservation, no reluctance when patients discuss their problems with their doctors. But the disclosure is certainly intended to be private. If a doctor should reveal any of these confidences, he surely effects an invasion of the privacy of his patient. We are of the opinion that the preservation of the patient's privacy is no mere ethical duty upon the part of the doctor; there is a legal duty as well. The unauthorized revelation of medical secrets, or *any* confidential communication given in the course of treatment, is tortious conduct which may be the basis for an action in damages."

Applying the above logic to the Horne case, our court states:

> "Unauthorized disclosure of intimate details of a patient's health may amount to unwarranted publicization of one's private affairs with which the public has no legitimate concern such as to cause outrage, mental suffering, shame or humiliation to a person of ordinary sensibilities. Nor can it be said that an employer is necessarily a person who has a legitimate interest in knowing each and every detail of an employee's health. Certainly, there are many ailments about which a patient might consult his private physician which have no

bearing or effect on one's employment. If the defendant doctor in the instant case had a legitimate reason for making this disclosure under the particular facts of this case, then this is a matter of defense."

Another observation made by the Alabama Supreme Court:

"It should be noted that Alabama has a * * * * statute which gives the state licensing board for the healing arts the power and imposes on it the duty of suspending or revoking a doctor's license who wilfully betrays a professional secret. Title 46, §257 (21), Code of Alabama 1940, as last amended, reads as follows:

'The state licensing board for the healing arts shall have the power and it is its duty to suspend for a specified time, to be determined in the discretion of the board, or revoke any license to practice the healing arts or any branch thereof in the state of Alabama whenever the licensee shall be found guilty of any of the following acts or offenses:

* * *

(14) Wilful betrayal of a professional secret.

And;

A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients; unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community. American Medical Association, Principles of Medical Ethics, 1957, §9 (Published by AMA)'

When the wording of Alabama's State licensing statute is considered alongside the accepted precepts of the medical profession itself, it would seem to establish

(Continued on Page 770)

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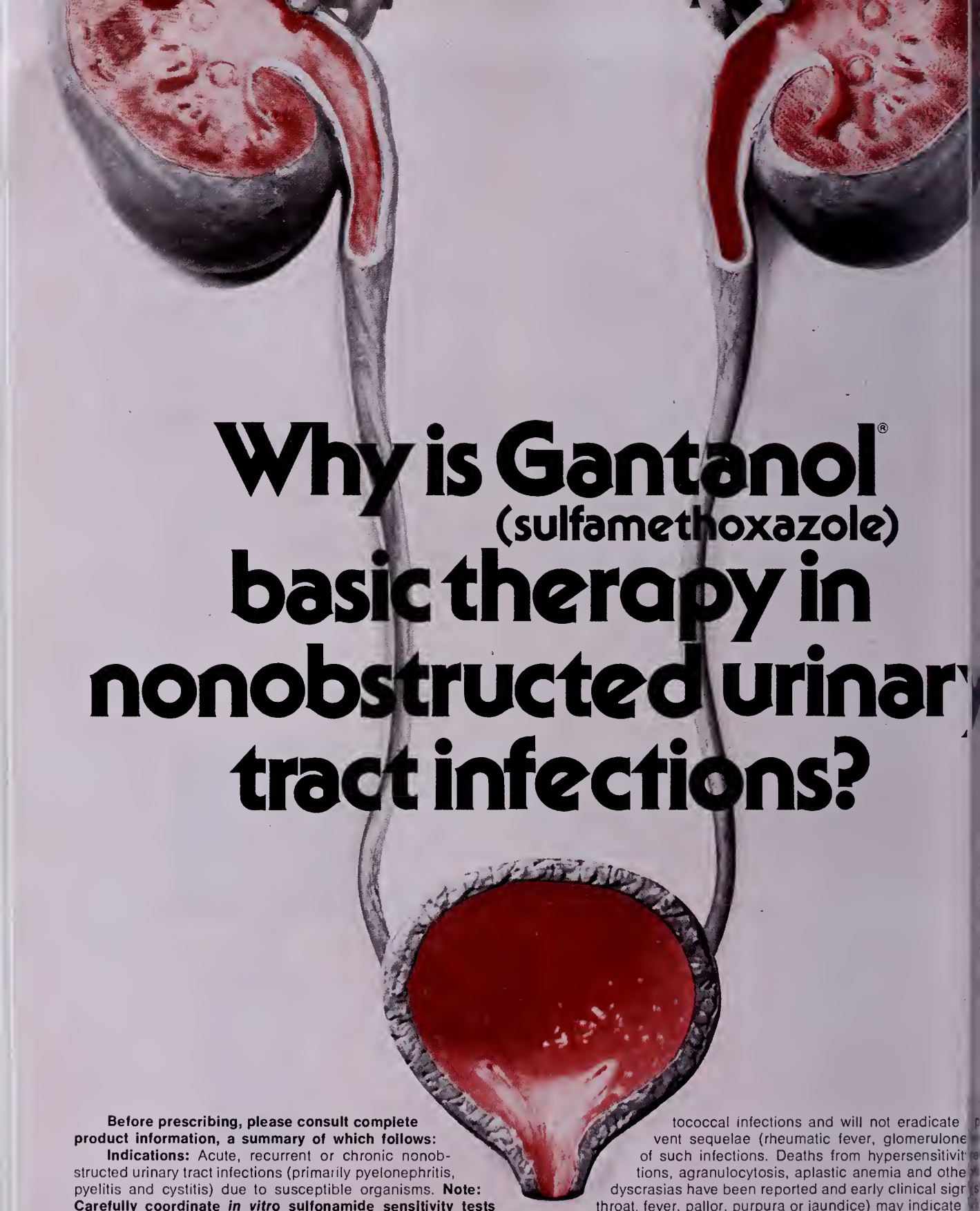

Why is Gantanol® (sulfamethoxazole) basic therapy in nonobstructed urinar tract infections?

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Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic strep-

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vent sequelae (rheumatic fever, glomerulone
of such infections. Deaths from hypersensitivit
tions, agranulocytosis, aplastic anemia and othe
dyscrasias have been reported and early clinical sigr
throat, fever, pallor, purpura or jaundice) may indicate
blood disorders. Frequent CBC and urinalysis with micr
examination are recommended during sulfonamide therapy.
cient data on children under six with chronic renal disease

Precautions: Use cautiously in patients with impaired
hepatic function, severe allergy, bronchial asthma; in gluc
phosphate dehydrogenase-deficient individuals in whom
related hemolysis may occur. Maintain adequate fluid in
prevent crystalluria and stone formation.

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tic anemia, thrombocytopenia, leukopenia, hemolytic anem

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ıra, hypoprothrombinemia and methemoglobinemia); *allergic actions* (erythema multiforme, skin eruptions, epidermal necrolys, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaylactoid reactions, periorbital edema, conjunctival and scleral ection, photosensitization, arthralgia and allergic myocarditis); *strointestinal reactions* (nausea, emesis, abdominal pains, hepas, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* eadache, peripheral neuritis, mental depression, convulsions, axia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous actions* (drug fever, chills, toxic nephrosis with oliguria and uria, periarteritis nodosa and L.E. phenomenon). Due to certain emical similarities with some goitrogens, diuretics (acetazolade, thiazides) and oral hypoglycemic agents, sulfonamides have used rare instances of goiter production, diuresis and hypoglymia as well as thyroid malignancies in rats following long-term ministration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

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Alabama's Health Care System Responded Well To "Night of Horror"

"Some higher power from above must have been watching over our medical facilities," Don Bussey, administrator of Guin Hospital, Guin, Ala., said, following the town's blackest night, April 3, when in 19 seconds the town of 2300 people was virtually destroyed by vicious tornadoes.

Although the hospital itself had more than $30,000 damage, it is one of the four buildings in Guin that weathered the violence with the least destruction. The other three were the nursing home, the drug store and the clinic of Guin's only doctor.

Guin was hardest hit by the tornadoes which wreaked death and destruction across an 18-county area of North Alabama.

Press reports indicate that over 300 injured victims were seen and treated at 21-bed Guin Hospital that night. Hospital officials did not have time to record the injuries treated or even count the victims.

Bussey remembers that the day of April 3 had been unseasonably hot. Then, around 8 p. m. the rain and hail began. At 9:04 p. m., the tornado struck, breaking all windows in the hospital, ripping away its lobby, damaging the roof, and leaving the small hospital without heat, power or water.

Using emergency power, and an emergency water supply which arrived later, Guin's doctor worked with doctors from neighboring Sulligent and Red Bay all night long. Hospital staff members and volunteers made their way through the debris to help.

Guin Hospital became an emergency unit, with the injured transferred to hospitals in nearby towns. By daybreak, emergency help was on hand from across Northwest Alabama and later the next morning two busloads of nurses arrived from the Tuscaloosa area, bringing with them food prepared by the dietary department of Tuscaloosa's Druid City Hospital.

"The response of people across the country has been phenomenal," Bussey said. "The 3M Company, which has a plant in Guin, flew in a doctor and three engineers from St. Paul. The Red Cross, the Salvation Army, the National Guard have all been wonderful."

"Some of the hardest working volunteers were a group of Menonites from Amory, Miss., who came in and did physical labor—working with chain saws to clean the streets and the entrance to the hospital and helping replace windows. We are deeply indebted to all these kindhearted people," he said.

Although Guin was hardest hit, hardly any of North Alabama was spared. The latest count of federal assistance officials is that there were 84 fatalities and 894 injuries resulting from the tornadoes. All hospitals from Birmingham north, enacted disaster plans or went to an alert status.

The only other hospitals which suffered damage were the two Jasper hospitals—Community and Peoples Hospitals—where roofs, windows and grounds were touched by the tornado's winds. Damage was minor, although at one point the second floor of Jasper Community Hospital had to be evacuated when a nearby tornado was sighted. Each of the hospitals saw and treated around 50 victims.

"The most memorable thing to me from the tragedy is the professional way our employees responded," J. B. Thompson, administrator of Jasper Community Hospital, said. "Their determination to get to the hospital without being called, their calmness, their dedication—I'll never forget it."

Cullman (Ala.) Hospital, ironically, had rehearsed its disaster plan April 2. On April 3, tornadoes battered Cullman County for almost three hours. The hospital was ready. Doctors and other medical personnel worked round-the-clock. A team from the District No. 1 Tuberculosis Hospital in Decatur gave voluntary assistance.

At Cullman Hospital, there were 26 victims seen and released. Seven were admitted and one died. Dr. F. L. Crocker, chief of emergency service, said that without the staff's quick handling of patients, casualties would have been much higher.

At Huntsville Hospital, records show 120 patients treated. This does not include a number of minor cases which were not logged. There were 51 admissions, 11 of these to intensive care. There were eight dead on arrival and three more deaths within two weeks.

Huntsville Hospital received patients from six counties in North Alabama. At several points during the night ambulances were diverted to other hospitals in the Huntsville area and to a hotel which somehow retained its power. Several doctors went to the hotel to treat victims there.

Around 275 employees voluntarily reported for duty at Huntsville Hospital, along with some former employees who realized they could be of help. Other community volunteers and families of patients assisted hospital personnel.

The hospital's disaster plan was in effect for nine hours. Twice during the night patients and employees had to be moved into halls when tornadoes were seen near the hospital. Damage was done about a block away.

Volunteers took decorative candles out of the gift shop and placed them in strategic spots not on auxiliary power. Patients and workers said their glow was a strangely comforting sight.

At hospitals in Athens, Moulton, Fayette, Haleyville . . . all across North Alabama . . . personnel worked through the night treating victims brought in from the state's little-known communities—Harvest, Berry, Hazel Green, Yampertown.

(Continued on Page 770)

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Brief Summary

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CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.

Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.

Indications: Vaginitis due to *Candida albicans* and other *Candida* species.

Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.

Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.

Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

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Federal law prohibits dispensing without prescription.

References:

1. Melges, F. J.: Obstet. Gynecol. *24*:921, Dec. 1964. 2. Cameron, P. F.: Practitioner *202*:695, May 1969. 3. Olsen, J. R.: Journal-Lancet *85*: 287, July 1965. 4. Giorlando, S. W.: OB/GYN Digest *13*:32, Sept. 1971. 5. Decker, A.: Case Reports on file, Medical Department, Julius Schmid. 6. Friedel, H. J.: Md. State Med. J. *15*:36, Feb. 1966. 7. Roberts, C. L. and Sullivan, J. J.: Calif. Med. *103*:109, Aug. 1965. 8. Giorlando, S. W., Torres, J. F. and Muscillo, G.: Am. J. Obstet. Gynecol. *90*:370, Oct. 1, 1964. 9. Abruzzi, W. A.: Western Med. *5*:62, Feb. 1964.

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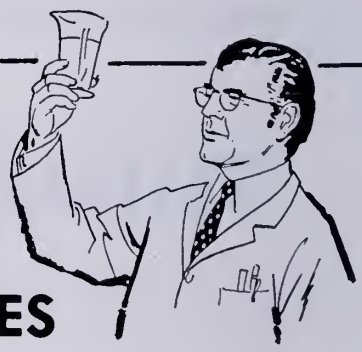
Frank Perryman, administrator of Sylacauga Hospital and president of the Alabama Hospital Association, expressed his pride in the way Alabama's hospitals responded to the disaster.

"Adversity is the true test of our ability to respond," he said. "I am extremely proud to be a part of Alabama's health care system, and particularly to know that the people in our hospitals are dedicated professionals who place the saving of lives above their personal safety."

(Continued from Page 761)

clearly that public policy in Alabama requires that information obtained by a physician in the course of a doctor-patient relationship be maintained in confidence, unless public interest or private interest of the patient demands otherwise. Is it not important that patients seeking medical attention be able to freely divulge information about themselves to their attending physicians without fear that the information so revealed will be frivolously disclosed? As the New Jersey Supreme Court so aptly pointed out, what policy would be served by according the physician the right to gossip about a patient's health."

If you have any questions regarding the implications of this decision, I suggest you contact your attorney or liability insurance carrier.



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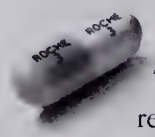

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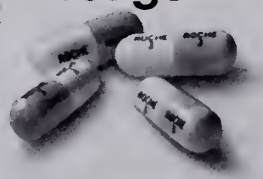

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Precautions: In the elderly and debilitated and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradu ally as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitor and phenothiazines. Observe usual precautions ir presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulatio and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiet states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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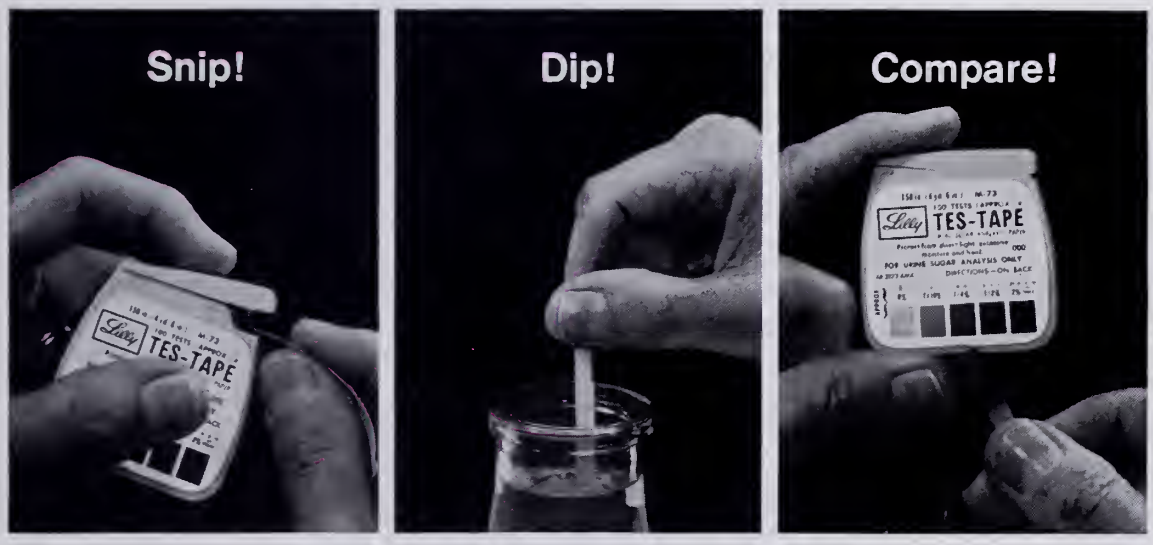

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

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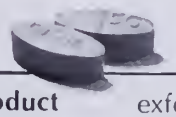

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Note: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in chronic and recurrent urinary tract infections.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia in elderly patients on diuretics, primarily thiazides. Sore throat, fever, pallor or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. Data are insufficient to recommend use in infants and children under 12.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, allergy or bronchial asthma; and in those with glucose-6-phosphate dehydrogenase deficiency, where hemolysis may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12.

Usual adult dosage: Two tablets b.i.d. for 10 to 14 days. For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

Supplied: Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10.

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Bactrim™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

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Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

A high assurance of antibacterial activity
in cystitis, pyelonephritis and pyelitis diagnosed as chronic and due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which appears on preceding page.

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